PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, OCTOBER 6, 1883.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON SOME OF THE RELATIONS WHICH MALARIAL AFFECTIONS AND TYPHOID FEVER BEAR TO EACH OTHER.

Delivered at the Hospital of the University of Pennsylvania, September 15, 1883,

BY WILLIAM PEPPER, M.D., LL.D.,

Provost of, and Professor of Clinical Medicine in, the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M.D.

GENTLEMEN,—I shall ask you to observe with me to-day, even though in a somewhat superficial and cursory manner, several cases which are at present in the wards, for, if I do not take advantage of this opportunity, I may not soon again have the chance of presenting a group of fever-cases which illustrate in a very interesting manner, in the first place, the completely distinct character of malarial and typhoid affections; in the second place, the manner in which malarial affections sometimes resemble typhoid fever; and, in the third place, some of the ways in which typhoid fever and malarial affections may be associated. I do not intend to go into any detailed discussion of the treatment of these cases, but shall rather occupy myself in showing you, in a cursory way, the general course of the cases, and some of the general diagnostic features.

BILIOUS REMITTENT FEVER.

The first patient is W. C., 39 years of age, born in Scotland, but came to this country when a child. For four years he has been tramping about the country; his real occupation, however, being that of a boiler-maker. He has been a heavy drinker, chiefly of beer. Fifteen years ago, while in the navy, he had intermittent fever. Since that time, he has had some return of the malarial fever every fall. This tendency to return at certain periods of the year is a peculiar and characteristic feature of malarial affections. A man who has once had a severe attack of malarial fever may, although entirely cured of the original attack, exhibit in successive years, and especially during the spring and fall, a tendency to a return of the trouble. On the 16th of August he went to work, and continued to work until the 28th of the same month. In the afternoon of this day he had a chill, followed by fever and sweating. The next morning he was chilly, with frontal headache, severe pain across the loins, nausea, vomiting, and gastric distress. He remained in bed. Since then, he has not had a regular chill, but has had irregular fever, the temperature being highest in the evening and lowest in the morning, fever, however, being always present, with derangement of the stomach and thirst. There has been no diarrhœa, no bleeding from the nose, and no delirium. He has had a great deal of headache, which has been worse in the evening when the temperature is the highest. When admitted, his temperature was 104°, the face flushed, the conjunctiva slightly yellowish, the tongue foul, with a yellow coat and disposed to be dry in the middle as he lay with his mouth open; there was no appetite; vomiting occurred whenever anything was taken into the stomach; there was a great deal of nausea, no diarrhœa, a little distention of the belly, and no eruption. The spleen was twice its normal size, but the liver was not materially enlarged. There was impaired expansion at the base of both lungs, with some gurgling râles.

There has been, then, the history of an old malarial affection, recurring every year, and of an acute attack of fever, which, when he was admitted, had lasted nine days, and which did not present the characteristic features of typhoid fever, but rather those of bilious remittent fever.

Typhoid fever comes on slowly. There are several days during which the patient feels poorly. This man had a distinct chill on the afternoon of the day on which he had felt perfectly well in the morning. In typhoid fever, there may be vomiting early, but there is no marked tendency to vomiting. There is loss of appetite, the tongue is coated, but the gastric symptoms are not severe, while, on the other hand, the belly is distended, and there is a tendency to diarrhœa. This man has had marked gastric symptoms, heavily-coated tongue, nausea, persistent vomiting, but no diarrhœa. In typhoid fever, epistaxis is common. It has not been present in this case. In the second week of typhoid fever, nervous symptoms are usually developed; there is slight wander-

ing, restless sleep, with, perhaps, delirium at night, causing the patient to leave the bed. This man has had nothing of the kind. Headache is common to both, and will not aid in the diagnosis. In typhoid fever, the spleen is enlarged, but only moderately so. It is rarely, and certainly not so early in the disease, enlarged to the extent that we find it here. About the seventh day of typhoid fever, an eruption appears. This man has had no eruption. The course of typhoid fever is not positively affected by treatment. I shall show you that we have quickly brought about a cessation of this man's fever by specific treatment.

You see, then, the marked diagnostic features which separate this case of bilious remittent fever from a case of typhoid fever.

The treatment, in brief, was as follows. On admission, he received nine grains of blue mass, followed by a laxative. This produced a moderate movement of the bowels. He then took twenty grains of sulphate of quinine a day, and immediately his fever broke, and on the second day he was entirely free from fever, the temperature being 98.4°: in other words, specific treatment produced specific results. In typhoid fever, that, or any other amount of quinine which you could give, would not bring down the fever. It would prevent it from soaring to a high point, but it would not stop it altogether. But when, encouraged by finding the temperature fall to 98°, we reduced the dose of quinia to six grains, the fever immediately went up again to 102.5°. A large dose of quinia again brought it down. The remedy was then continued in gradually diminishing doses to the present time. The man has had no fever for several days, and is now practically convalescent.

I would also remark that this man, whose system is so fully impressed with the malarial poison, will require prolonged anti-malarial treatment. I shall insist that for several months he shall take sulphate of cinchonidia conjoined with arsenious acid and iron, and that for several years to come he shall, at the approach of each spring and fall, take antiperiodic doses of cinchonidia and then continue the remedy in smaller doses for some months; and every spring and fall for four or five years after this, he shall take arsenious acid. In this way the remnant of malarial poison will be eradicated from his system.

MALARIAL FEVER FOLLOWED BY TYPHOID FEVER.

Our second patient is 21 years old; was born in England, and came to this country about a year ago. Last spring, he was working in Bucks county, in a highly malarious district, and was much exposed to damp and cold. While working out in the country he felt dull, had occasional headache and costive bowels. He also states that he had a ravenous appetite. Soon after this he went to work in Darby, and was there taken sick with quotidian intermittent, and for several days he had each day a chill followed by fever and sweating. He, unfortunately, did not attend to this, and it passed into what appeared to be a remittent fever. This remittent fever being partly checked by quinia, left the man with a continued fever. It was clear that this man, whose system was impregnated with malarial poison, had contracted a mild typhoid fever. He was admitted to the hospital on September 10; on the 11th, a crop of rose-colored spots appeared on the abdomen; another crop came out on the 14th. On admission his face was flushed, there was some cough, and he was disposed to sweat. When the finger was drawn across his forehead or chest, a red streak was left; the bowels were distended, there was gurgling in the right iliac fossa, general soreness over the abdomen, the tongue was dry, brown in the centre, and tremulous; there was no appetite, but the stomach retained the light nourishment that was allowed; there has been broken sleep, but no delirium until last night; there has been no special complaint of headache; there is slight enlargement of the spleen, and congestion of the roots of both lungs, with moist râles; a faint blood-murmur is heard over the heart. His temperature has been extremely uniform for some time past, varying from 102.2° to 103.5°; the fluctuations have not been more than three-fourths of a degree. In the previous case of remittent fever, the fluctuations were very marked. This is not to say that there may not be decided remissions in typhoid fever. The course of temperature in typhoid fever is something like the following: the person may feel poorly for four or five days, and have distinct fever, probably with a temperature of 101°; the

next morning it may be 101.5°, in the evening it may reach 102°; by the seventh day it will probably be about 101.5° or 102°; for the next eight or nine days the temperature keeps mounting up, being a little higher each evening and a little lower in the morning, but not as low as on the previous morning—there may be a variation of one and a half or two degrees between the morning and the evening temperatures. During the third week the temperature is pretty uniform; during the fourth week the temperature drops in the same way as it ascended, so that by the close of the fourth week, if there is no complication, the patient is free from fever.

This man came to us with a history of an irregular fever of an uncertain duration; it is therefore difficult to say at what period of the disease we have our patient. The only thing that we can say is that he is still at the period at which eruption comes out. The detection of an eruption is a matter of the greatest importance. When you observe how the system may be affected by malaria, and then have typhoid fever grafted upon the previous disease,—when you reflect on the irregular course which remittent fever pursues, and when we come to see how closely catarrhal fever may imitate typhoid, you will recognize that the finding of an eruption is, as I have said, a matter of the greatest importance. These spots are of a rose-color; they are separate; their shape is oval, and they vary in length from one-twelfth to one-sixth of an inch; they are not at all, or very slightly, elevated above the surface. Sometimes, if the touch be delicate, the finger may detect that there is a slight elevation; when pressed upon, they entirely disappear; when the pressure is taken away, they soon return. The eruption is found for the most part on the belly, and on the lower part of the chest; but I have seen it on the arms and legs when it could not be found on the belly, and have found it on the back when it existed on no other part of the body. In the vast majority of cases, however, it makes its appearance first, and often only, and continues longest, over the belly and the lower part of the thorax. It usually makes its first appearance about the seventh day of the disease; it does not all come out at once, but it appears in successive crops; there may be five or six or fifteen or twenty spots in each crop. The spots continue to come out as long as the disease is in actual progress; as a rule, no more come out after the end of the third week, unless the case is going to be an irregular and prolonged one.

In a case like the present one, in which there is a distinct history of a malarial fever, followed by an irregular sort of remittent fever which has continued to the present time, the question to be decided is whether this man has remittent or typhoid fever. The onset was like that of malarial fever. There has been very little gastric disturbance. There has been delirium. The remissions have not been so marked as in the previous case of remittent fever. There has been continued fever. The man has had a cough, but this might exist in remittent fever. There has been no epistaxis; he has not had distention of the belly, nor diarrhœa; but none of these are constant in typhoid cases. If we had any doubt as to the diagnosis, we certainly had none after we found the specific eruption.

In examining the abdomen of a patient for the typhoid eruption, you will, particularly in hospital patients, often find other eruptions which are not to be confounded with that due to typhoid fever. There may be little pimples; these are papular and elevated above the skin. There may be an eruption due to the bites of mosquitoes, fleas, bedbugs, or other insects; these all have a little central opening, where the irritating matter was deposited. They are elevated, do not entirely disappear on pressure, and are not rose-colored.

This patient is passing through an ordinary mild case of typhoid fever. His temperature has never been above 103.5°; there have been no severe nervous symptoms, no profuse epistaxis, and no vomiting. To-day he has a copious perspiration, and I think that this will be a short case of typhoid fever.

In the treatment of this patient we have not employed the large doses of quinia which we did in the previous man, for they would have had no specific effect. He has, however, received a larger amount than he otherwise would, because he has had malaria. He has taken twelve grains of quinia, with mineral acid, every day, receiving two grains of quinina sulphate and five drops of dilute hydrochloric acid every four hours. He has been kept in bed, and has been given an absolutely liquid diet. As you know,

there is in this disease ulceration of the lower part of the small intestine, and if irritating or indigestible articles of food are given, perforation and death may ensue even in mild cases; so that the study of the course of the disease and a recognition of its true character is not only a matter of interest, but may be a question of life or death to the patient. So important is this that if I were not quite certain as to the nature of the disease I should put the man on large doses of quinine, as a therapeutic test, and continue it for two or three days. If a rapid fall in the temperature to 98° did not take place, I should treat the case as one of typhoid fever. It is in these mild cases particularly that the friends of the patient are anxious that he should be allowed to get out of bed and take injudicious articles of food. If you yield to their solicitations, the patient may have a sudden pain in the right side, enormous distention of the belly, a running pulse, constant vomiting, and be dead within twelve hours. It is in these mild cases that indiscretions in diet are more likely to be allowed, and therefore it is that a study of the diagnosis is doubly important.

UNCOMPLICATED TYPHOID FEVER.

Our next patient, M. L., is a Russian, 22 years of age. He came to America three years ago. His history and habits are good, but he lives in a very malarious district. Three years ago, he suffered from sunstroke, but recovered. Two years ago, he had a severe attack of intermittent fever, lasting for six months. Two weeks before admission, he began to feel heavy, dull, indisposed to work, had vague pains, occasional bleeding of the nose, and failure of appetite. The symptoms gradually became more marked until the 25th of August, when he felt very ill, had headache, complete loss of appetite, and his bowels were purged to an unusual extent by a small dose of laxative. This was followed by diarrhœa. He continued to grow worse, and was brought to the hospital on the last day of August and about the eleventh day of the disease. He had all the symptoms of typhoid fever.

On admission, he was given quinine and dilute hydrochloric acid. He was put to bed, given a liquid diet and one or two small doses of opiates. Under this treatment the man has progressed in the most satisfactory manner. On admission, his temperature was 105°. The remissions were very marked, sometimes being as much as three degrees between the morning and evening temperatures. The temperature has steadily come down. On September 5 the temperature was 101°, and on the 8th, the twentieth day of the disease, it was down to normal for the first time. On one day there was a rise to 100°; but practically he has been free from fever for about a week.

This has been an uncomplicated case of typhoid fever, with a slow onset, with vague symptoms, lassitude, increasing debility and loss of appetite, occasional epistaxis, headache; then more marked fever, and finally such debility that he had to go to bed, and then appeared the fully-developed train of symptoms. This case has run a mild and perfectly satisfactory course, terminating in recovery at rather an early period. Although this man has been watched very carefully since admission, we have been unable to discover any eruption. It is possible that the eruption may have been present and disappeared before he was brought here; but with a history so distinct as this was we did not need the eruption to make the diagnosis. Let me here impress upon you the fact that the eruption, although a very characteristic and a very common symptom, is not absolutely necessary; and, indeed, there is no symptom in any disease that is absolutely necessary. The eruption occurs in perhaps ninety or ninety-five per cent. of all cases of typhoid fever. It is peculiar in the fact that mild cases may have the most eruption. I have seen a person, with the mildest form of typhoid fever, covered from head to foot with rose-colored spots; and, on the other hand, I have seen patients with severe and even fatal typhoid fever, with extensive intestinal ulceration, in whom the eruption was but slight. The amount of eruption bears no direct relation to the severity of the disease.

TYPHOID FEVER FOLLOWED BY MALARIAL FEVER.

Lastly, I shall show you a woman whose case has been a very interesting one. She was born in Ireland, and has been in this country only two months. She lives in this city. There has been no special sickness in the neighborhood where she lives. She has had all the fevers of childhood, except scarlet fever. She was admitted on August 15, and then stated that she had been taken sick five days previously.

She would now be at about the thirty-sixth day of her disease. The attack began with the well-recognized symptoms of typhoid fever, and followed a period of indisposition and weakness, with aching in the bones, and a little vomiting. On admission, the face was flushed, there was a yellow tinge to the conjunctivæ, the mind was dull, the belly distended, the tongue red and dry, and glazed rather than coated; no appetite, a great deal of pulmonary congestion, with moist bronchial râles everywhere, but no pneumonia; there was no eruption. She had irregular chilly feelings, with flushes of heat, but the fever continued pretty steadily; epistaxis recurred; the bowels were quiet, but when a small dose of a laxative was given she had eight loose, yellow stools. This illustrates a point in typhoid fever, that is, although there may be no actual diarrhœa, yet there is irritability and sensitiveness of the bowels; so that you may make use of this therapeutic test in cases in which there is doubt. In remittent fever, the bowels are usually, although not always, not only quiet but constipated, so that small doses of a laxative produce no effect.

The temperature on admission was 103°, and the pulse 120. This was, then, an ordinary case of typhoid fever. About the twentieth day of the disease, the fever began to fall, and by the twenty-third day the morning temperature was 99°, but in the evening it went up to 102° or 102.5°. The fluctuations between morning and evening were very marked, sometimes as much as four degrees. I should have stated that in the fourth week of typhoid fever there are marked vacillations in the temperature; but this is more than common. On the morning of September 5, the twenty-seventh day of the disease, the temperature was 98°, in the evening 101°; the next morning it was 98°, that evening, 101°; next morning 98.5°, evening, 99°; the succeeding morning it was 99°, but in the evening it suddenly went up to 107°. The woman was very ill, the face was flushed, there was rapid action of the heart and excited pulse; but no local symptoms were present to explain this rapid rise. There was no pneumonia and no perforation of the bowel; a careful examination showed that this rapid rise was not dependent upon the development of any true inflammatory complication. I neglected to say that, for a few days before this, there had been a number of unhealthy-looking boils coming on her person. In a disease which is more or less putrid, as is typhoid fever, where there are a number of ulcers in the bowel throwing off infecting material, it is not impossible, and, indeed, it is not rare, to have a sort of septic poisoning, almost like pyæmia, develop. These boils suggested something of this kind. The rise of temperature was either due to pyæmia or was the result of an outbreak of malaria, or it was one of those anomalous ephemeral rises which may be found in the convalescence of a number of diseases. The course of the case soon showed that it was not pyæmic. The next morning the temperature was down to normal, and the patient was immediately placed on large doses of quinia. So far there has been no return of the fever. There was very little in this case to make one suspect that the woman was malarious; there was no history of malaria, she had only been in this country for two months, and had just come off the sea; she had not lived in a malarious district. We can, however, explain this sudden rise in no other way.

I have thus passed in rapid review these cases which illustrate some of the relations which exist between typhoid fever and malarial affections, have described the general course of the diseases, and have given you some of the diagnostic features.

ORIGINAL COMMUNICATIONS.

DIETETICS FOR THE SICK.

Read before the Philadelphia County Medical Society, September 12, 1883.

BY CHARLES M. SELTZER, M.D.

IN presenting this paper it is but justice to state that it has been prepared during the leisure of the past week as a substitute for one by another member, who was unable to keep his engagement. The subject has been selected more with the hope of eliciting some practical ideas, and from the desire to emphasize its importance, than to announce anything new or to exhibit the best paces of a hobby. Close attention to the methods of our most successful general practitioners convinced me that in dietetics was their stronghold. At the same time there was plainly to be seen a distressing lack of knowledge as to variety

of foods and the preparation of them. In order to find out whether there was a practical remedy for these two great faults, I have gone over a thorough course of preparation of diet for the sick, under the instructions and guidance of Mrs. S. T. Rorer, in whom are combined the practical attributes of cook, chemist, physiologist, and nurse, and I can safely say that if every member of this Society were to do likewise, their armamentarium, success, and self-satisfaction in the practice of medicine would be increased manifold.

It would be almost an endless task to discuss the literature of this subject. Let us condense the opinions of physiologists, chemists, hygienists, and all others in authority, by stating that food is divided into nitrogenous or albuminous, hydro-carbons, or starch, sugar, and fats, and minerals or the various salts of the alkalies. Of these the nitrogenous and minerals are the building-materials, and the hydro-carbons are the heat- and force-producers. Food may also be classified into liquid, semi-solid, and solid, and, as the sum total of digestion is a matter of absorption and assimilation, it follows that the more liquid or dissolvable food is, the more readily will it be absorbed: hence this is the form to be chosen when it is desirable to obtain nourishment at the least possible expense of organic action. There are also conditions in which bulk and solidity are necessary, and here we select the semi-solid or solid food, or even indigestible matter.

Nitrogenous food, in its natural combination with mineral matters, is mostly made absorbable by stomachic digestion: it rebuilds the tissues, and the waste and refuse are excreted by the kidneys and skin as urea and uric acid and its salts.

Hydro-carbons are digested in the mouth and small intestines, are burnt up by union with the respired oxygen, thus supplying heat and force to the body. The waste and refuse are excreted by the lungs and bowels.

About three ounces of nitrogenous and twenty ounces of carbonaceous food are necessary to sustain the life of an adult man in idleness. With these epitomized facts in mind, let us consider the importance and use of dietetics in the treatment of disease. The importance has been signalized by Bence Jones, who has said that the effect of diet is far beyond any known remedy. This fact has been so well known for the past century that volume after volume has been written on "Dietetics," "Diet Cures," etc. A few of these have become standard works of authority, because of their scientific and exhaustive treatment of the subject, while hundreds of others have had but an ephemeral existence. All have had to reiterate the same facts, because very few new ones have been learned, and, aside from the knowledge of artificially-digested food, the student of a hundred years ago knew as well as the student of to-day about what diet was necessary for the sick. True, theirs was an empirical teaching: they knew nothing of the physiological actions of diastase, pepsin, and pancreatin, but they were all the more practical for that. Our present scientific reasonings on digestion are but the formulation of rules and theories for very old facts. The importance of the subject is made more manifest when we consider how much of the sickness that we are called upon to treat is the result of some error in eating or drinking, and, as "removal of the cause" is the first step towards the promotion of recovery, it is easy to perceive how essential it is to know what constitutes proper and improper diet. Life depends upon diet, and the restoration of health depends upon the same principles as its preservation. Disease is the result of the violation of the laws of health; hence the first step towards recovery is to re-establish those laws; and, as the material for repair and support must come from diet, we, as thorough physicians, should have a complete *practical* knowledge of dietetics and a proper appreciation of their curative value. But almost a decade of experience among physicians compels me to acknowledge that this is not the case, and that the most lamentable deficiency is in the practical application of the subject. Nature's simple and easily-understood remedies are either lost sight of or ignored in the blind endeavor to find a medical specific for every human ill, or to establish an ideal notion, theory, or pathy. For the treatment of chronic affections, some good points may occasionally be gained by even observing the *modus operandi* of quacks, homœoquacks, and proprietary medicines, for in connection with either a depurative or inoperative preparation, such dietetic and hygienic directions are almost invariably *insisted* upon as would in themselves relieve tem-

porarily, and perhaps permanently, some of the most obstinate cases.

The methods of dietetic treatment of diseases are as various as are the ills that flesh is heir to, but all of them contain some of the following principles as essential features. In acute diseases, *rest* is of primary importance; it is the fundamental principle of their medical and surgical treatment, and the same idea must be carried out in dietetics by remembering what part each organ serves in absorption, assimilation, and excretion, and by avoiding such food as would cause the performance of that function. Of course this plan is only to be pursued while the disease is advancing, and as soon as recovery begins there must be a gradual return to a promiscuous diet, very little at first, just enough to slightly exercise the crippled organ, using as great care as we would in instituting passive motion in a limb that has been fractured. Nature enforces this principle by the loss of appetite that marks the onset of nearly all acute diseases. The dietetic rest of an organ does not necessarily imply a depletory diet, for, while it is non-active, other organs may be made to perform a compensatory amount of work, and thus sustain or even increase the patient's vitality,—so great is the versatility of our organic functions. It is upon this idea that we must act when we obey the command of Graves to feed fevers. In chronic diseases—those in which the natural course is direct from bad to worse, until death or some interposing process puts an end to them—every organ must be made to do its utmost; the whole system must be awakened to the threatening destruction. Herein lies the broadest field of action for our subject. No time should be lost; food should be administered as frequently as assimilation and proper amount of organic rest will allow; the appetite should be kept active, by using liquid, semi-solid, and solid food, prepared in such a variety of ways as to allow no charge of monotony or disgust. Surprise is frequently a useful element. Instead of leaving the patient to vacillate over his or her likes and dislikes, the nurse should be privately instructed how and what to prepare for each time, and how to serve it in the most appetizing manner. A valuable aid, usually lost sight of, is condiment. Think but for a moment how a savory dish will sharpen our appetites while in health, and I am sure you will perceive its stimulating influence upon a debilitated patient, to whom the flat and insipid preparations usually offered are loathsome or even nauseating. This disgust might frequently be avoided, and the amount of prescribed medicine be lessened. Many of the bitter tonics and carminatives of our materia medica are the same as are used in cookery, and are none the less efficacious in a palatable dish than in the nauseous pill or draught. Therefore let the delicate aroma of herbs, celery, and bay leaves pervade the soups; use India curry on starchy foods, and when desirable add *capsicum*, *piper nigrum*, etc., to animal broths and substances. In so doing, if necessary, you can satisfy the qualms of your professional dignity by remembering that in catering to the palate you reflexly stimulate the organs of digestion.

Some articles of diet may be administered simply for their curative effect. A five-ounce cup of strong coffee contains about sixty-six grains of extract, or an equivalent of about two grains of *caffeine*,—quite sufficient to relieve a neuralgia, or a headache and sick stomach after a dose of opium. Beef-tea made red-hot with red pepper is the very best treatment for delirium tremens. A patient to whom I once administered such a dose, made so strong that I would not have dared to taste it myself, afterwards told me that it was the most refreshing and *cooling* drink he had ever taken. A London surgeon to the police told me that he had treated a hundred and fifty cases of delirium tremens with this remedy *alone*, and had not lost one. The use of *chloral* in these cases is criminal, and many a death-certificate of "delirium tremens" ought to be "heart-failure from chloral-poisoning." Mucilaginous teas and drinks made from gelatin, isinglass, Irish moss, and flaxseed are very soothing to any inflammation within the digestive tract. Green vegetables are necessary to cure as well as to prevent scurvy.

An old practitioner, who had spent his early professional life in the country, told me that when he first commenced practising he used all the ordinary remedies in typhoid fever without any satisfactory results, until the introduction of turpentine by the late Prof. George B. Wood. In it he soon discovered a useful ally, not so much in the drug *per se*, but because con-

venience and time compelled him to use a thick flour-gruel as a vehicle, and the patients were nourished sufficiently to live through the attack.

In the science and art of preparing sick-diet there is a most lamentable lack of knowledge, especially among physicians. They know the preparations by name, but not by nature, and the only way to learn the latter is to don the apron and take a practical course from a practical and scientific cook. Such a course was inaugurated last winter in this city and in Boston with a very satisfactory result. The prospect for this season in this city is that the course will be very well attended. It is the only way to learn. I could read you receipts by the score, but it would be as useless as reading off that many medical formulæ.

A CASE OF AMPUTATION OF THE BREAST, WITH REMARKS.

Read before the Philadelphia County Medical Society, September 12, 1883,

BY HENRY LEAMAN, M.D.

MRS. J. J. W., æt. 48, married twenty-nine years, is the mother of eight children still living, and has been the subject of ten severe miscarriages. She presented herself at my office on the 1st of September, 1882, complaining of a tumor in her breast, which she had noticed for the first time three months previous. At that time a small pimple upon the surface of the skin served to call her attention to the swelling that lay beneath in the substance of her breast. Examination showed a tender enlargement, the size of an English walnut, situated deeply in the inner lower quarter of the left breast. She stated that during the past week she had experienced for the first time frequent sharp, retracting pains shooting through the nipple. Menstruation had ceased with her six years previous, without giving rise to any trouble. She now had no cachexia, and was apparently in her usual health.

On the 18th of the same month she called again; the growth had not perceptibly increased, but she spoke of having pain in her breast-bone. Amputation of the breast was recommended. The effect of this advice was to send her upon a blind pilgrimage through the desert of therapeutics. Now electricity, now pow-wowing, now homœopathy,—each in its turn was tried, with results equally gratifying to the patient.

The ignis-fatuus which I had lighted brought her again to me on the 23d of April, 1883. The tumor then was of an oval shape, and about four inches in length. From its inner anterior surface were extending two cornua, slightly ulcerated, about three-fourths of an inch in length. The skin over the tumor was deeply congested, red, and inflamed, as was also the skin for several inches around. The tumor in front rested upon the cartilages of the rib, but was movable. The glands in the axilla were slightly involved. With the assistance of Drs. Hatfield, Brubaker, Welch, and R. Leaman, the breast was removed under the spray, on April 26, 1883, and Lister's dressing applied.

One nodule of hardness was removed from the axilla. At the sternal end the cut surfaces could not be approximated within two inches, owing to the necessary ablation of tissue.

On May 8, the posterior three-fourths of the incision had entirely healed and were healthy. The anterior one-fourth was perfectly healthy and granulating rapidly. All sutures and the remaining ligatures were removed.

On and after May 10, the wound was dressed with iodoform, cosmoline, and salicylated cotton, under which treatment the wound rapidly healed. Dr. Brubaker made a histological study of the growth, and pronounced it carcinoma.

As soon as the cicatrix was complete, neuralgic pains began to be felt in the left arm, right leg, and body. At first the cicatrix remained perfectly healthy in appearance. Subsequently, however, a nodule appeared in the lower part of the neck behind the left sterno-clavicular articulation. Next, the left axilla, the posterior and healthy part of the cicatrix, both began to show hardening. At present there is a chain of nodules along the whole cicatrix,—one large and painful is felt over the cartilage of the third rib on the left side. The left axilla is but one hard pyramid. The left hand and arm are swollen. A pain of a lancinating, burning character is referred to the left scapula, arm, and axilla, occasionally shooting in the course of the incision.

The apparent freedom from involvement of the axillary glands at the time of the operation, and the rapid development of

the disease after the healing of the cicatrix, would seem to point to the idea that the original tumor was but a local nidus for a constitutional trouble, and that this having been destroyed, a general efflorescence of the disease ensued. A kindred idea is found in the popular belief that a manifestation of phthisis may follow the operation for the cure of anal fistula. The observations on the change of life in women would seem also to bear upon the same point.

Dr. Brubaker's Analysis of the Tumor.—"Upon section the tumor is firm and hard, and presents a white, glistening surface, from which can be scraped a small quantity of fluid matter. Under the microscope the connective-tissue stroma is seen to be abundantly developed; in its meshes are developed epithelial cells, some of which have undergone degeneration. In some situations the cells are arranged in a linear manner, whilst in others they form groups or nests."

REMARKS ON THE CHICAGO BEEF WIRE SKEWER.

Read before the Philadelphia County Medical Society, September 12, 1883,

BY W. R. D. BLACKWOOD, M.D.

THE supply of good, wholesome meat to a large city is a problem involving many points of great importance. Many cattle are slaughtered within a few hours after reaching the abattoirs, before the feverishness and excitement resulting from a long railroad-journey have abated, and the meat under the circumstances is not nearly so good or suitable for food as it would be even in healthy and prime animals, were it killed after a due time of rest. For a short time past beef slaughtered in Chicago and brought here in refrigerator cars has attracted the attention of those able to judge the article according to its merits, and for quality it is pronounced fully equal to any heretofore put on the market, and far ahead of the great bulk previously sold in the city, so far as a wholesome, sound, and moderate-priced beef is concerned. The animals are selected from approved droves, and well fed, watered, and housed for a definite and proper time before killing, and the product, therefore, is not only in its appearance perfect, but in the vital point of fitness for wholesome, nutritious, and palatable food it is unrivalled.

Some weeks ago a sensational attack was made on this variety of beef in the interest of a clique of butchers in this city, who, knowing the value of the Chicago article, were afraid of the effect on their business when it became better known to the public, and the silliest pretext, among others, advanced, was a supposed danger to consumers from the novel skewers employed to fasten the labels on the hind- and fore-quarters, these being of barbed wire such as I exhibit to you to-night. It was predicted that an epidemic of harpooned tongues, tonsils, and pharynges would ensue from swallowing unawares by consumers the numerous wire skewers concealed in the meat, and I am informed that for a time a serious falling off in sales actually resulted from fear on this point. You will readily see that any one who would try to gulp down a morsel of meat large enough to hide this fastener must at the same time be in a famishing condition, have the appetite of a tiger, and need lessons in table etiquette, to put it mildly.

The labels which are attached—one to each quarter only—are removed by the butcher before cutting up the meat, and could not, even if allowed to remain, fail to attract attention of both cook and eater. Mr. Bradley, of the Great Western Market, is the largest dealer in this city of this excellent beef, and he has kindly supplied me with samples of the barbs. The claims which he makes for the particular beef under consideration are worthy of notice, as his experience in business for some years past is unequalled in this city, and the enormous quantity which he distributes to a large section of surrounding country fully justifies the high value he places upon it. I am glad to confirm what he says, from personal experience in my family. The meat is simply delicious, and excels anything we have previously had from the best butchers of the city.

TWO CASES OF COMPOUND AND COMMINUTED FRACTURE OF THE SKULL.

BY C. W. DE LANNOY, M.D.,
Chester, Pennsylvania.

IN connection with the explosion of Jackson's pyrotechnic works in March of 1882, there occurred, among the many serious injuries inflicted by various projectiles, a series of fractures of the skull, of

which two furnish interesting data concerning the nature of these accidents and the results of treatment.

As an explosion was not anticipated, and the building was in the act of burning, the ordinary curiosity of a street crowd kept all faces directed towards the scene of action; in consequence of this, all wounds inflicted by missiles were situated upon the ventral or anterior surfaces of the body. Both fractures of the skull to which I here allude were situated above the eminences of the frontal bone, the ages of the patients, both males, being respectively nineteen and twenty-eight.

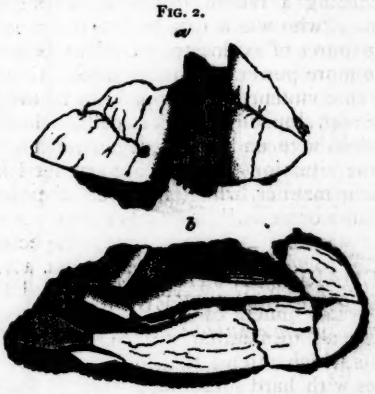
Case I. was first seen three days after the accident. Some good Samaritan had carefully closed the lips of a three-inch scalp-wound, extending obliquely across the left frontal region above the eminence. At the time when seen by myself and a colleague, who had the case in charge, the boy presented the appearance and conditions peculiar to one suffering from compression of the brain. Removing the stitches and thus releasing an abundant collection of coagulated blood and pus from beneath the scalp, fragments (*b*, Fig. 1) were taken away, all of which represent what was lost of the external table, about one-half the thickness of the middle table clinging to their under surfaces. The internal table (Fig. 1, *a*) was completely detached and turned over, so as to present its concave cerebral surface at the bottom of the wound. This plate was removed in three pieces, and the pulse of the patient rose from 30 to 60 almost instantly. With proper care as to local and constitutional treatment, the case steadily progressed to a favorable issue.

FIG. 1.

PORTIONS OF THREE TABLES, OS FRONTIS OF LEFT SIDE. *a*, internal table and portion of middle table; *b*, external table and portion of middle table.

Case II. was that of a strong, wiry Irishman, who filled the office of fireman at the time of the explosion. On the third day after the accident, which was the time chosen for the operation, he was not suffering from a single symptom of either concussion or compression of the brain. Fragments of bone removed from his head (Fig. 2, *a* and *b*) were very much comminuted and pushed down into the substance of the cerebrum, which we found considerably lacerated and softened; it may, in fact, be fairly stated that at least a teaspoonful of brain-matter came away with the many fragments of bone removed. Recovery was steady and progressive, with but few drawbacks, all due to imprudence of some kind on the part of the patient.

FIG. 2.



PORTIONS OF THREE TABLES, OS FRONTIS OF RIGHT SIDE. *a*, cerebral surface of internal table; *b*, fractured external and middle tables.

While I know but little concerning the details of these cases, yet from the adjoining histories and illustrations several interesting subjects for argument may be chosen.

In the first place, both fractures were compound and comminuted, and resulted from a concentrated blow, of which the force had been largely spent in producing the local lesion. In both, injury to the brain was limited to parts immediately beneath the seat of fracture; particularly was this true of No. 2, who from the beginning presented no symptoms of either concussion or compression. Case No. 1, through the ignorance of his first attendant, was, I

believe, reduced to the condition in which we found him, by the retention of intracranial blood-clots and discharges, and therefore incurred far greater risks of secondary intracranial inflammation than were to be anticipated for his fellow-sufferer.

Another important and noticeable feature is the difference in proportions as to the size of the pieces removed from the external and internal tables. In the case of No. 1 there was considerable shelving off of the internal table, while in No. 2 the external is relatively larger than the internal. Facts, fortunately, confirm theory in affording a reason for these differences. No. 2, who was acting as fireman close by the source of explosion, must have received the more powerful blow, one which, by its intense violence, might be said to have cut through the entire thickness of the calvarium without any lateral distribution of force, and the depth of injury sustained was greater and entirely out of proportion to its extent. On the other hand, No. 1 was standing at a distance, as a spectator only, and received the blow from a projectile which by the time it reached him had lost much of its original impetus. Now, all are familiar with the different results which attend the contact of projectiles with hard substances, when propelled from long or short distances. In the former case there is always more splintering, particularly at the point where the projectile obtains exit from the body it has come in contact with. In the latter case we meet with an aperture uniform in character throughout the entire thickness of the body struck by the missile.

It might prove of further interest to state that, although No. 2 lost a not inconsiderable amount of brain-cortex, both as the result of immediate injury and during the subsequent period of discharging, yet no mental or intellectual disturbance has been the result. For this I have my own evidence and that of his relatives. What bearing this fact may have upon the theory of the unilateral functions of the cerebrum I am not prepared to decide. It will be remembered, however, that experience has taught us that aphasia is at least in the large majority of cases associated with *right* hemiplegia, which, of course, means a hemorrhage affecting the *left* third frontal convolution,—aphasia rarely occurring when the hemorrhage is upon the opposite side of the brain. From a similar association of the left cerebral hemisphere alone, with the function of intellection, injury of the right side (as in Case No. 2) would occasion no mental disturbance. The argument, however, is purely theoretical, and needs the support of an experience with brain-injuries which I have not the good fortune to possess.

Before leaving the discussion, I would refer to the use of plates as substitutes for the bone lost in comminuted fractures of the cranium. Judging from the results obtained in these cases, I regard them as totally unnecessary, and should deprecate the use of artificial means of protection in cases for which nature does so much to replace the bone lost by accident. The attempts at repair, in both of these injuries, have resulted in the formation of a tough fibro-cartilaginous plate, which appears to afford the necessary protection to the delicate organs beneath, and, beyond wearing an external pad of hard rubber or other appropriate material under circumstances that might be thought to render such additional protection desirable, it would seem unnecessary, to say the least, to attempt further interference with nature's *modus operandi*.

REPORT ON THE PROGRESS OF OTOLOGY.

BY CHARLES H. BURNETT, M.D.

PHYSIOLOGY OF THE COCHLEA IN VERTEBRATES.

DR. B. BAGINSKY,* of Berlin, has recently laid before the Academy of Sciences of Berlin the results of a series of investigations on the cochlea of dogs. After alluding to the investigations in this direction by Helmholtz, Hensen, and J. Ranke, he deplores the fact that there have been no experimental researches which have resulted in any fixed conclusions regarding the cochlea of vertebrates, until the recent observations of H. Munk, who has shown that dogs in which the lower wall of the cochlea, near the round window, had been broken away, after remaining deaf for a period of fourteen days, again heard, though very imperfectly, and their perception of sound was limited to lower notes and noises. With this fact in view, Dr. Baginsky has performed a series of experiments on dogs, in the Veterinary School of Berlin, in order to find out

* June 14, 1883.

whether, and how far, the various parts of the cochlea, especially those portions on the *membrana basilaris*, are functionally dissimilar.

His plan of investigation has been, after opening the *bulla ossea*, to destroy entirely one cochlea, so as to render the dog totally deaf on this side and thus exclude one ear from the observations. In the other cochlea various parts have been destroyed, either by piercing it or by chipping off portions of it.

After this treatment, the dogs have been tested for long periods as to their ability to hear notes on organ-pipes, arranged for the purpose with the greatest care, and ranging from C′ to c⁗, the lowest and highest of which were open pipes. Finally, in the course of from three to ten weeks, when no further changes in the hearing could be detected, the animals were killed and the labyrinth removed. Then an uninterrupted series of sections were made, parallel to one another, in the direction from the base to the tip of the cochlea, and examined under the microscope.

The exclusion of one ear was very difficult, as either death resulted from the attempt to destroy the labyrinth, or phenomena of altered equilibrium were manifested, with partially-retained hearing.

But the slighter wounding on the opposite cochlea, when not productive of death or oscillations of the head, often produced, by the resultant inflammation, permanent deafness. However, even with this good result, many of the dogs, by reason of their inattention, etc., did not furnish reliable results in testing their hearing. In a large number of experiments, only a few proved of any value in the microscopic examinations. It was especially desirable to show finally, by the microscope, that pathological changes in one of the cochleæ had occurred throughout the organ, while in the other they had occurred only in the wounded portion. In the latter connection it was of great value to see that, with the finer changes in the fibres of the auditory nerve, grosser changes were also detected in the cells of the *ganglion spirale* and of the *intumescentia gangliformis Scarpæ*.

Dogs made completely deaf in one ear, and partially so in the other ear, by boring into the point of the cochlea, were, in the course of a few days, aroused only by the report of a pistol; towards the end of the first week they reacted distinctly to the note c⁗, and in some cases to the note c‴. In the course of the second week the dogs heard c⁗ and c‴; only rarely as low as c″. Reactions to sounds thus established became soon distincter, but did not descend the scale. As long thereafter as the animals lived, they did not hear notes as low as c‴ or c″.

Anatomical investigation of the cochlea the point of which had been broken showed that the upper turn and the greater part of the middle turn were filled with fibrous cicatricial tissue, with destruction of the normal contents: the lower remnant of the whorls of the cochlea and the rest of the labyrinth were entirely normal. Upon the other side—*i.e.*, where the hearing was destroyed—the cochlea was either entirely or nearly filled with cicatricial tissue. In the latter case, if the original soft parts were at all recognizable, it was seen that all or very nearly all the nerve-fibres and ganglion-cells were degenerated.

Dogs in which one ear had been made entirely deaf and which had been injured in the other ear by breaking off a small portion of the promontory at the base of the cochlea, manifested often temporary deafness in the latter ear. Very often it was found in these cases that not the entire cochlea but only the lowest turn was filled with cicatricial tissue, either in both scalæ or in the entire *scala vestibuli* and in part of the *scala tympani*, and also that the *membrana basilaris* was at these points destroyed. Sometimes in these instances fibrous constrictions in the trunk of the acoustic nerve were detected.

In more successful cases, in the course of a few days the dogs would move upon the discharge of a pistol, and later they would hear musical notes, first only slightly, then gradually more decidedly.

In a certain number of dogs, in respect to the beginning and the extent of the reaction, no difference was detected between high and low notes. A second set of dogs, in fact, a large class, began to react at once, both to high and low notes, but the reactions to low notes were at first distinctly stronger than those to high notes. Finally, in a third and smaller class the reactions were at first and for a longer time only in connection with low notes, the three or four lowest octaves; and at last, in the course of one or two weeks, reactions occurred in connection with higher notes. In conclusion, all these dogs appeared to

hear these high and low notes in a normal way.

In the ear which had been made entirely deaf, the cochlea was found altered in a way similar to that already described for injured parts of the opposite cochlea. In the latter ear, the small defect in the base of the cochlea, where the bone had been cut away, had been closed by a membrane, and in a small portion of the lowest whorl of the cochlea, which is nearest the round window, the entire *scala tympani*, or a part of it, and now and then a part of the *scala vestibuli*, were filled with fibrous tissue. In such cases, the *lamina spiralis membranacea* was often embedded in the fibrous tissue and destroyed. Otherwise, all other parts were normal, excepting that, at most, sometimes here and there in the cochlea a few nerve-fibres and ganglion-cells were apparently degenerated.

The beginning deafness in the less affected ear, the return of hearing, and the manner of its increase in all the experiments are explained by the loss of the fluid contents of the cochlea, and by the inflammation extending from the point of irritation throughout the membranous parts of the cochlea. The return of hearing is accounted for by the fact that after a slight laceration the wound closes, and the inflammation undergoes retrograde metamorphosis to a certain extent.

It was not supposable that after healing had occurred abnormal tensions temporarily existed in the basilar membrane, and the post-mortem examinations gave no support to the view that local contractions of this same membrane existed. It is claimed by Baginsky that the above experiments show *that the point or cupola of the cochlea contains the parts of the nerve concerned in the perception of low notes, while the base of the cochlea, near the round window and the promontory, contains the portions of the nerve concerned in hearing high notes.*

Upon this supposition many points in relation to *sound-conduction*, as well as *sound-perception*, may be made clearer, and your reporter draws the following practical deductions:

It must be borne in mind, first, that the sounds most important for the human ear to hear are those of the human voice, and, second, that these sounds are among the high rather than among the low notes in the musical scale. We also learn by the researches of the experimental physiologist that the parts of the internal ear which are best adapted to the perception of high notes are probably not only in the cochlea, but in that part of it nearest the promontory and the round window,—*i.e.*, nearest the tympanic cavity,—since these two parts of the cochlea abut upon the tympanic cavity. It is seen, then, by this anatomical arrangement and topographical distribution of the terminal nerves in the cochlea already described that those parts of the auditory nerve most important to have easily thrown into vibration, and, in fact, those most likely to be called into action by the sounds of the human voice, are placed where sound-waves would be most likely to reach them directly. For it is a physical fact that when sound falls on the membrana tympani some of it passes directly through the membrane, and across the tympanic cavity, and strikes upon the membrane of the round window and upon the promontory. Sound taking such a course would thus act almost directly upon the terminal nerve-fibres in the cochlea, underlying these two points, without pursuing the more roundabout way through the oscillations of the chain of auditory ossicles. By pursuing the latter course a sound-wave would impress the nerve-fibres in the cupola of the cochlea, which seem adapted to the perception of low notes, before it reached the round window. After passing the cupola, at the end of the vestibular canal, it would enter the tympanic canal of the cochlea, but would not impinge upon the nerves concerned in the perception of high notes (the important ones in our present consideration) until it reached the round window at the end of the tympanic canal of the cochlea. Hence it seems probable that high notes can be and are very largely heard directly, without being obliged to traverse the longer course through the oscillating chain of bones.

Another proof that the nerves lying near the promontory and round window are concerned in the perception of high notes is given by the experiments of C. J. Blake* with König's rods. It was here shown that when the membrana tympani was perforated, and the high note of a König rod thus more readily permitted to fall directly on the promontory and round window, not only very high notes could be heard, but considerably higher than when the mem-

* Transactions American Otological Society, 1872.

brana tympani was imperforate. It also showed that the important ability to hear high notes was retained, notwithstanding the loss of integrity in the drum-membrane.

If, however, the passage of sound-waves to the tympanic cavity, or to the membrane of the round window and promontory, is impeded, as in disease, then, of course, the nerve-filaments in the cochlea near these points cannot be reached easily.

Thus, in coryza, the first impairment of hearing is in connection with the higher and delicate tones of the human voice; because in such instances the nerve-fibres lying nearest the promontory and round window cannot be reached by sound-waves, on account of the swelling of the tympanic mucous membrane near these parts.

THE SIGNIFICANCE OF THE TRANSMISSION OF SOUND TO THE EAR THROUGH THE TISSUES IN AURAL DISEASE.

Dr. Samuel Sexton, of New York City, in a paper on the above topic, read before the American Otological Society at the annual meeting, July 17, 1883, draws the following conclusions:

1. When the vibrating tuning-fork, placed on the teeth or vertex, is better heard through the tissues on one side, it simply indicates that the better ear excludes wholly or in part such (tissue) transmission; but it does not prove that the auditory nerve in either is affected. (Of course, if the nerve of audition be gravely affected, sound will not be heard by any method of conduction.)

2. If the conductive mechanism is absent or greatly damaged in one ear, while the other remains more or less normal, aerial transmission will be found to be ineffectual in the diseased ear, while the tuning-fork, allowed to vibrate as before, will therefore be best heard in the diseased ear, while its vibrations will be almost entirely excluded from the healthy ear.

3. In labyrinthine disease pure and simple, the middle ear being normal, the tuning-fork would be best heard by aerial conduction; because bone conduction would be excluded. (In those extreme cases where destructive disease of the nerve has taken place, impulses of sound may be appreciated irrespective of either the transmitting or labyrinthine structures: thus, the deaf-mute is conscious of the sound of thunder, artillery, drums, stamping of feet on the floor, and the like.)

4. If the above deductions be true, we may conclude that the tuning-fork is of but little if any value in the differentiation of aural disease; and the same applies to König's rods.

In this connection your reporter would submit the following original reflections upon the diagnostic value of the tuning-fork, and upon the erroneous deductions made by its use regarding the nature of aural disease, especially in reference to so-called cochlear inflammation, supposed disease of the auditory nerve, and altered perception of sound in syphilitic disease of the ear.

The phenomena observed when a vibrating tuning-fork is placed upon the vertex, glabella, or teeth, either in an individual with or without normal ear or ears, have certainly been misunderstood. This has led to a misapplication of them in diagnosis, and to very false conclusions.

The chief error lies in considering the results obtained by its use as data for estimating the *perceptive* power of the nerves, rather than the *conducting* power of the auditory apparatus in the external and middle ear.

Hence phenomena in the manner of hearing the tuning-fork through the tissues have been attributed to alterations in the nerves, as in so-called "cochlitis," instead of to changes in the mucous membrane of the drum-cavity and in that covering the ossicula. The slightest changes in conducting power, which ensue upon the least change in the mucous membrane of the drum-cavity and its contents, or in the auditory canal, instantly alter greatly the way in which the tuning-fork is heard; whereas changes analogous in kind or extent, in the auditory nerve, would render it inactive as a percipient organ.

Thus the diagnostician in his eagerness has jumped over, so to speak, the nearer and plainer explanation of phenomena in the hearing of the tuning-fork, offered him in the changes in the drum-cavity or its contents, and has sought for an explanation of the morbid phenomena of audition in the more remote and less understood internal ear.

Thus it has come about that an endeavor has been made to establish the existence of a "syphilitic cochlitis,"* the so-called acoustic phenomena in which may be accounted for much more easily by the sup-

* Roosa, First Congress International Otol. Society, 1876.

position of altered conduction by reason of changes in the mucous membrane, so well known to occur in syphilis, than by the difficult and entirely untenable view that the changes in audition are due to alteration in the nerve and hence are phenomena of altered perception. This endeavor to remove the diagnosis from the nearer and more probable ground to a remoter and less known one has been not only unnecessary, but misleading; unnecessary, because the experiments of Helmholtz, Politzer, Buck, Hensen, C. H. Burnett, and McKendrick upon the mechanism of the ossicles and their relation to audition have been demonstrable *ad oculos*, and have made clear the phenomena of conduction of sound and how it may be interfered with; whereas we know positively nothing about the mechanism of perception of sound in the labyrinth.

Hence the endeavor to refer phenomena most probably occurring in the tympanic cavity and attributable to altered conduction, to a part of the ear unknown, excepting that it is concerned in all probability with perception, is unscientific, and misleading to younger minds.

The fact that sudden deafness in a syphilitic patient has been cured by an anti-syphilitic remedy is by no means a proof that the disease lay in the cochlea and was due to a "cochlitis." It would be just as much a proof, perhaps more, that the disease lay in the mucous membrane of the drum-cavity or of its contents, and, by interfering with sound-conduction, had caused deafness, and that the latter had been removed by the anti-syphilitic action of the drug upon the mucous membrane. Furthermore, if by "cochlitis" an inflammation in nerve-tissue is implied, it is by no means clear, on any ground, that an easy removal of the inflammation could be effected by any remedy, or, if the disease were removed, that the hearing would return either so quickly or so completely as in the cases of so-called "cochlitis" recorded by the writer alluded to.

Remarkable Longevity of a Physician.—The death is announced of Dr. Jachimovicz, of Jaroszinka, in the government of Kiew, Russia, at the ripe age of one hundred and six. It is said of him that he was able to superintend his extensive and sucessful practice till near the end of his life.—*Medical Press.*

TRANSLATIONS.

Inflammatory Fungoid Neoplasm of the Skin.—Dr. R. Naether reports the following remarkable case from Prof. Wagner's clinic in Leipsic. The patient was a man, aged 40 years, without any hereditary predisposition or syphilitic history. In July, 1881, after being exposed to the wet, he suffered from gastric disturbance, lasting only for a few days, but in the end of August of the same year an eruption broke out on his entire body, with the exception of the face, in red, burning, itching, and elevated spots, about the size of a dollar, which a month later extended to the face. This condition remained about stationary until September, 1882, when the spots increased greatly in size and secreted a rapidly-decomposing fluid. The growths then increased to such an extent as entirely to destroy sight and all resemblance of the face to that of a human being, the only place where the skin appeared at all normal being at the tip of the nose. A few growths were also found scattered over the body. Death occurred from prostration on November 28. This disease is regarded by Dr. Naether as granuloma sarcomatodes cutaneum.—*Deutsches Archiv für Klin. Med.*, July 31, 1883.

Gangrene of the Penis as a Consequence of Acute Gonorrhœa.—Jeszenszky reports the case of a robust countryman, 23 years of age, who was seen by him seven days after infection: the discharge and swelling of the penis had then lasted four days. The glans was completely covered by the swollen prepuce; there was a profuse greenish discharge and sharp pain at the root of the penis, which was greatly swollen and of a greenish-brown color. Incisions were made in both sides of the penis, extending along its entire length, and a large quantity of fetid pus evacuated. On the next day several vesicles had formed on the external skin surface, and a circular line of demarcation was commencing to form at the inner end of the incisions, and three days later the entire gangrenous skin separated; no fever was present. Healing took place by granulation under iodoform dressings, and was complete in about five weeks, leaving two broad scars on the upper surface of the organ.—*Centralblatt für Chirurgie*, August 4, 1883.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, OCTOBER 6, 1883.

EDITORIAL.

ANNOUNCEMENT.

WITH the last number, and the close of the thirteenth volume, Prof. H. C. Wood resigned the duties and responsibilities of the position of chief editor of the TIMES,—duties which he had so long and so ably discharged, and responsibilities with which he had become identified. On account of increasing engagements, Dr. Wood has been reluctantly compelled to take this step, which he had contemplated for some months, and which he felt that he might safely do now that the prosperity of the TIMES (and, in truth, mainly through his able and vigorous management) appears firmly established. As will be noticed in the present number, he will still continue his welcome contributions to its pages.

This being the first issue of the volume, we have commenced a series of reports upon progress in the several departments of medicine, which will henceforth appear regularly throughout the year, arrangements having been made for these articles with gentlemen possessing special qualifications for the duties which they have undertaken. It is believed that this new departure will be found acceptable to our readers. The subjects and reporters are as follows:

On Nervous Diseases, also Therapeutics and Materia Medica, HORATIO C. WOOD, M.D., Professor of Materia Medica, Pharmacy, and General Therapeutics, and Clinical Professor of Diseases of the Nervous System, in the University of Pennsylvania, etc.

On Obstetrics and Gynæcology, THEOPHILUS PARVIN, M.D., LL.D., Professor of Obstetrics and Gynæcology in the Jefferson Medical College of Philadelphia, etc.

On Anatomy and Surgery, J. EWING MEARS, M.D., Professor of Anatomy and Surgery in the Pennsylvania College of Dental Surgery; Demonstrator of Surgery in the Jefferson Medical College, etc.

On Syphilis and Genito-Urinary Diseases, J. WILLIAM WHITE, M.D., Lecturer on Operative and Genito-Urinary Surgery, with Venereal Diseases, in the University of Pennsylvania, etc.

On General Pathology and Clinical Medicine, JAMES C. WILSON, M.D., Physician to the Philadelphia Hospital and to the Hospital of the Jefferson Medical College, etc.

On Diseases of the Throat and Nose, CARL SEILER, M.D., Lecturer on Laryngology in the University of Pennsylvania, etc.

On Medical Applications of Electricity, W. R. D. BLACKWOOD, M.D., Physician to St. Mary's Hospital; Consultant on Nervous Diseases, and Electrician to the Presbyterian Hospital, Philadelphia, etc.

On Diseases of the Skin, ARTHUR VAN HARLINGEN, M.D., Professor of Diseases of the Skin in the Philadelphia Polyclinic, etc.

On Diseases of the Ear, CHARLES H. BURNETT, M.D., Professor of Diseases of the Ear in the Philadelphia Polyclinic; Aural Surgeon to the Presbyterian Hospital, etc.

On Diseases of the Eye, ALBERT G. HEYL, M.D., Ophthalmic Surgeon to the Episcopal Hospital, etc.

On Morbid Anatomy and Pathology, MORRIS LONGSTRETH, M.D., Lecturer on Pathological Anatomy in the Jefferson Medical College; Pathologist and Curator to the Pennsylvania Hospital, etc.

On Physiology, ROBERT MEADE SMITH, M.D., Demonstrator of Physiology at the University of Pennsylvania, etc.

On Medical Chemistry, WM. H. GREENE, M.D., Professor of Chemistry in the Philadelphia High School; formerly Demonstrator of Chemistry at the University of Pennsylvania, etc.

On Hygiene, Toxicology, and Medical Jurisprudence, HENRY LEFFMANN, M.D., Professor of Clinical Chemistry and Hygiene in the Philadelphia Polyclinic.

With this exception, the TIMES, under its present management, will continue the features that our readers are familiar with, —pursuing the same outspoken and independent course which has characterized it in the past, upon subjects of general pro-

fessional interest. True to the principles expressed in the Code of Ethics of the American Medical Association, and a consistent advocate of scientific rationalism in medicine, it will continue to advocate higher medical education, and to lend its voice and influence to every measure calculated to raise the standard of medical practice.

"CROWNER'S 'QUEST LAW."

IN the discussion of the qualifications of a candidate for coroner, we think that it must be conceded that the examination of a corpse in order to determine the mode of death can properly be performed only by a person fitted by training and experience for the work; in other words, he must be a physician. Any one not possessing such training and experience is disqualified from forming a sound and reliable judgment upon the evidence presented. The medical examiner system of Massachusetts has demonstrated the fact that the requirements of both science and law are better satisfied by having the duties formerly performed by a coroner intrusted to a purely medical commission, since questions constantly arise, both at the inquest and in court, which can only be answered by physicians. The only excuse for the continuance of that mediæval functionary, the coroner, therefore, will be that he himself is a physician. The profession in this city made a special effort some years ago to have this truth acknowledged by our masters the politicians, and for several successive elections it has been accepted as the principle in making nominations. One of the contending parties has recently seen fit to break this rule and to nominate a candidate who is not a physician; the other very wisely nominated a gentleman of high professional standing who possesses all the qualifications required for the office. Those physicians of Philadelphia who are in favor of supporting principle rather than party will have an opportunity afforded them this fall of re-asserting the principle they have declared, that the coroner must be a medical man. It is not very complimentary to the profession to be told that the political coroner can spare out of his fees enough money to pay two physicians to work under him. It would be much better, if there is income enough to share among three, that the third also should be a medical man, and thus have medical examiners entirely independent of any simply political influence. The coroner has relations with the medical profession, and claims that he has power to reprimand physicians and fine or commit them for contempt (for under such circumstances their true feelings sometimes may be inadvertently expressed, even though it would be better policy to conceal them): on account, therefore, also of these professional relations, should this functionary (if not really *functus officio*) be not merely a physician, but also one whose standing and attainments will command the respect and support of the profession.

CLINICAL INSTRUCTION AT THE PENNSYLVANIA HOSPITAL.

REFERENCE to the early history of the Pennsylvania Hospital shows that when the project of starting the hospital was first broached in this city the fatal objection was made that means were wanting to pay the physicians for their attendance upon the patients, thus recognizing, at that date, the principle of equity that no one has the right to enjoy the labor and time of another without rendering to him an equivalent in return. When informed of this difficulty, certain physicians, out of pure charity, volunteered their services to attend the poor in the wards who were unable to pay. Subsequently the physicians agreed also to contribute their fees received from students in attendance upon the practice of the house, towards forming a library. The library grew, and the fees

increased even more rapidly, so that a surplus of some fifteen thousand dollars had gradually accumulated a few years since; which, however, was not returned to the lawful owners, the medical staff, as it should have been, but was "loaned" to the hospital-funds. At a recent meeting of the managers of the hospital a resolution was adopted, the object of which is to create a revenue to the hospital by requiring physicians to give clinical lectures, and by charging students five dollars each for admission to them. This will have the effect of reducing the size of the classes to such a point that it would be absurd and inconsistent with self-respect for such eminent practitioners to waste time in lecturing before them. We hope that the managers will rescind this act, as it practically closes the doors of this old and venerated institution to clinical teaching, and reduces the gentlemen of the medical staff, in the eyes of the public, to a menial position, if not to practical slavery.

LEADING ARTICLES.

THE SOUTHWEST AS A HEALTH-RESORT.

EACH year, as the winter threatens, in the Northern United States an exodus begins of those who are already stricken with or who fear consumption, and flows steadily towards Florida. That State certainly offers to the invalid great natural beauty, balmy airs, and moderately good hotels; but its distressing crowding, its abundant malaria, and its moist air, favoring, in many cases, pulmonic softening, are very serious obstacles to recovery of health.

As is well known, there runs almost through the United States, from San Antonio, Texas, northward, a wide strip of country whose air is extraordinarily dry. Less convenient of access, mostly unsupplied with hotels and the resources of civilization, this region has nevertheless begun to endanger the supremacy of Florida as a winter health-resort for consumptives.

To our thinking, for most cases of phthisis its superiority over Florida is unquestionable. The intense dryness of the air renders the latter more stimulating to the general system. Dry heat is borne much more easily than moist heat, dry cold than moist cold, and at a moderate temperature the dryness seems to brace up nerve and muscle. Further, experience shows that pulmonic breaking-down occurs much more slowly under the desiccating influence of a Texan desert than under that of a soft sea-air.

The great natural beauties of Colorado, and the circumstance that railroads first went into this part of the dry belt, have led to its development as a sanitarium. The height of these health-resorts above the sea tends, however, to the production of hemorrhage, by necessitating more work on the part of the lungs, whilst the intense winter cold enforces during many months a chiefly in-door life.

Without occupying more space and time with discussion, enough has been said to show why the climate and circumstances of the southern portions of this dry belt should be carefully studied by physicians, and why there is a rapidly-increasing pilgrimage each winter to Texas.

In Texas itself the opinion among both the laity and the profession is wide-spread that the consumptive should spend the whole year, and not a part of it, in the State if he hopes for arrest of his disease. This opinion seems well founded. Mere warmth of climate is chiefly valuable to the consumptive because it allows free out-door existence and lessens the tendency to catarrhal attacks. Great dryness of air seems to have a more direct curative influence, and really to arrest or prevent pulmonic softening; and when warmth and dryness are associated the conditions are most favorable.

The difference between the air of the far Southwest and that of the East is at least as great in summer as in winter. The United States Army Regulations require that a horse shall be given five gallons of water; but in Texas during the summer twenty gallons are required, even though no work be done. A man when marching will drink two to four gallons of water in the twenty-four hours. I have myself drunk one-half gallon in twenty minutes after a seven hours' march without water. A very noticeable thing under these circumstances is that, though such enormous draughts of water are taken, scarcely any urine is passed,—certainly not one-half of

the amount ordinarily voided in the same period at home. The escape of water by insensible perspiration is enormous; and it is a question well worth practical study as to the possibility of curing early Bright's disease by thus bringing to a minimum the work required of the kidneys.

The consumptive who hopes to find life in this dry region ought to seek it all the year round.

In regard to the winter climate of Texas we do not mean to say much. It is an axiom that out-door life is the life for the man with weak lungs; and a guide and tent are here, as in Florida, worth more than medicine and fine hotels in the beginning of the disease. If the patient have ample means, an ambulance, a pair of mules, a guide, and a Sibley tent make life in the winter months of Texas not only possible but pleasurable, and, if the traveller be anything of a sportsman, enjoyment and a very important addition to the *menu* may be had, provided care is taken to go into a game region. A large part of the State is no better than a desert, with little or nothing in it; but, what with four species of quail and numerous waterfowl in the more cultivated parts, antelope, deer, and turkeys, and the Mexican and Messina quail, in the wilder regions, it is easy to arrange a trip so as during the winter months to find game continually in abundance.

An advantage of this mode of life in Texas is, that, if meats be supplied by the gun, by means of California canned goods a very excellent table can be spread at a comparatively moderate cost. During a recent outing, buying of the United States commissariat, our mess-bills for a party of four were ten dollars a week apiece. In this bill were included whiskey, which some of the party declined, and for all an abundance of California claret (a good, honest wine, which may be purchased in San Antonio for one dollar a gallon), and also the monthly wages (thirty-six dollars and food) of a cook.

The tent must be provided with a stove; otherwise the sudden northers of Texas would be unendurable. The temperature at any time of a day may be that of a Northern June, when across the prairie appears a sharply-defined dark cloud, with a column under it, marching steadily and rapidly forward. The column is a raging mass of wind and hail and snow, and protection from it is absolutely necessary. An immediate halt and preparation of the tent, or a seeking of its cover if camp be already pitched, can alone save the travelling invalid from destruction.

Everywhere in the far Southwest the food question for the invalid is most important,—indeed, dominant. Outside of one or two places, decent food is very rarely if ever found in Western Texas; and it is this difficulty which constitutes the most insuperable obstacle to the consumptive tourist, and almost necessitates the taking of supplies. In my experience, these supplies can be purchased more cheaply at San Antonio than in our Eastern cities, so that it is useless to load one's self down at home.

In regard to the cost of camping in this region, the expense of feeding has already been intimated. The only other expense is that of the outfit, which can rarely be hired, but must be purchased. The cost of an ambulance, two horses, and harness in San Antonio is about four hundred dollars; but to any one who can stand horseback-riding—and for others the trip must be of doubtful utility—it is much cheaper and at the same time much better to buy ponies, which can be bought at from forty to seventy-five dollars each. At least two are necessary, one for riding and one for carrying. A pack-mule costs a little more than a pony, but is preferable for packing. Whilst one pony will scarcely follow another at all unless continually watched, and a mule pays comparatively little attention to another mule, the respect of the long-eared animal for his more highly-organized colleague is such that he can scarcely be driven away from him. If the travel be leisurely, the Texan pony or pony-mule will keep in good condition by simple grazing. The small Texan mule, which is a cross between the ass and the pony, is as much more hardy and enduring than the large mule as the pony is than the horse. The largest men in Texas seem to select the smallest ponies: so no man need be deterred by his size from bestriding a pony. I have seen four persons—man, wife, and two children—carried cheerily along on the back of a little "burro," *i.e.*, donkey, scarcely bigger than a large Newfoundland dog.

The wet season of Texas may be a serious blot in its yearly climate from the consumptive's point of view. It is usually

considered to be during the months of July, August, and September; but in San Antonio and its neighborhood the early winter months are sometimes quite wet. The fact is that San Antonio is really the extreme southern limit of the arid region, and that in order to get the full benefit of the dry treatment at least much of the year should be passed north or west of that city. The hotel accommodations of San Antonio, however, are bad enough, but beyond it there is probably not, at present, a decent hotel in all Texas. At El Paso a new hotel has been erected, a fine, large structure, which is to be opened this autumn under the management, so we are credibly informed, of one of the leading officers of the Southern Pacific Railroad. If this be true, it will probably be well kept. El Paso is in the very heart of the arid region, is on the borders of Mexico, is a terminal point of the Central Mexican Railroad, and an extremely active place. Unless it be in second-class theatres and in the presence of a garrison band, we know of no superior attractions possessed over it by San Antonio; and if the new hotel be well kept and supplied with good water,—the water of El Paso being, in general, execrable,—it will afford a most excellent place for spending the early winter months. The Central Mexican Railroad is now open for travel to Chihuahua, and is being completed at the rate of three miles a day. It is expected to reach the city of Mexico in a year, and then the health-seeking invalid, by means of the Denver and Rio Grande, the Atchison, Topeka, and Santa Fé, and the Central Mexican Railroads, can travel at will, almost through the length of the dry belt, and, if he choose, enjoy always a temperate climate.

As we have found the summer temperature at San Antonio, Texas, it is very warm but quite bearable. The middle of the day is excessively hot outside of the houses, but almost all the time there is a strong breeze, which makes the temperature quite endurable in a well-shaded room. The rains seem to be usually in the form of tremendous downpours, lasting only a few hours, and the hot sun soon dries the ground, so that the most delicate invalid can walk about freely. With proper suburban accommodations, if such could be found, the consumptive might get through a summer in San Antonio very well, provided he was content to stay in the house during the hours of sun and find amusement in himself and his books.

Texas offers no attractive mountain-resort. The only place which is high enough to very distinctly affect the temperature is the country about Fort Davis. The sunshine here is intensely hot from 11 A.M. to 5 P.M., but even at these times in the houses the air is cool enough to be pleasant. The nights are mostly cold, requiring blankets, while the early mornings and evenings are delicious. The wet season at this place is very decided, but manifests itself in heavy showers rather than continuous rain. There is some very fine scenery in the neighborhood of the fort: indeed, the fort and town are beautifully situated, and the invalid might very well visit the place were it not for the fact that there are simply no accommodations whatever that a person accustomed at home to anything better than a laborer's cottage, could endure.

El Paso is higher than San Antonio, but my experience does not make it cooler. The whole Texan Rio Grande region is a terror in its heat. The United States post of Presidio, which is several hundred miles below El Paso, has recently been abandoned, chiefly on account of its temperature. As I was informed by the late commanding officer, the thermometer, as early as June, was frequently 110° F. at midnight in an adobe house, the coolest of structures.

From El Paso twenty hours of railroad-riding will take the invalid to Santa Fé, which is in its climate probably the most attractive spot in the whole arid belt. Its moderate elevation, whilst not sufficient usually to affect the consumptive seriously, is enough to give immunity from excessive heat. It affords, therefore, a delightful refuge to any one who finds the Texan summer too severe. It is true that the hot months are its wet season, but during my stay the mornings would be bright and clear, the mid-days swept by violent rain-storms, and the late afternoon beautifully brilliant in sunshine, with perhaps drifting cloud-masses. According to the resident army surgeon, such days were typical of the summer climate of the region. Then there is a large, well-kept hotel, affording a fairly good table, much better than I ever saw anywhere in Texas. A little farther north, on the Atchison and Topeka Railroad, are the hot springs of Las Vegas, which are said to be very well pro-

vided with hotel accommodations, although of this I cannot speak from personal observation. H. C. WOOD.

NOTES FROM SPECIAL CORRESPONDENTS.

CINCINNATI.

MELANO-SARCOMA.—Not long since, Dr. W. H. Falls, of this city, reported a case of melanosis in which the patient had turned absolutely black before dying. The disease being so rare, it was with some interest that, during a recent visit to the city hospital, I learned from Dr. Thomson, the resident physician in charge, of a similar case in the medical wards. The patient is a male, æt. 57, carpenter. Previous health good. He had a pedunculated tumor, springing from the integument over the upper lumbar vertebræ, removed by abscission over a year ago. The wound healed kindly, but in a few months in the cicatrix a dark tumor made its appearance, soon followed by others in the subcutaneous areolar tissue of different parts of the body. These small diffuse tumors are from the size of a pea to that of an almond, and as they grow older form an attachment to the overlying integument. They are dark in color, and are pretty well distributed over the whole of the surface of the body, numbering five hundred and sixty-one in all, two hundred and thirty-two being attached to the skin. The patient's general health is fair, and he is under the expectant treatment. He is watched with considerable curiosity by all the pathologists of the city.

The cooler weather of September has brought home most of our citizens who have been sojourning at watering-places, and with them, of course, the family doctor. They might as well have remained in the city, for, according to a paper read before the Academy of Medicine by Dr. Cleveland, a gentleman whose facilities for knowing whereof he speaks are excellent, this summer has been unusually healthy for the young folk, the ordinary summer children's diseases being both scarce and mild.

Students are rushing into the medical colleges with more than usual avidity for the time of year. Professor Seely, dean of the Medical College of Ohio, tells me that the number of matriculates is larger than ever before in the history of the colleges this long before the season opens.

At a fire in the central part of the city nine lives were lost because of the poor means of egress from the upper floors of the building. This, of course, has raised the customary cry for fire-escapes in all of our manufactories where any number of people are engaged above the ground-floor. But few of the factories are adequately provided with fire-escapes, as every large fire we have abundantly testifies.

PRESCRIBING DRUGGISTS.—This subject has at length grown to be such a nuisance that even our dignified Academy of Medicine has seen fit to take some steps in regard to it. A committee of three—Drs. Ransohoff, Cleveland, and Thrasher—was appointed to see what would best be done. Some of the members were in favor of taking a list of those druggists known to be guilty of unprofessional conduct, and of boycotting them. Others were of the opinion that, unless a radical change in the action of our pharmacists should take place, physicians would be driven to dispensing their own drugs. This, it was said, would also prove an effectual preventive against the repetition of prescriptions without the physician's advice. Speaking of the repetition of prescriptions, Dr. Culbertson said that he knew of one of his prescriptions that had been refilled without his order for the patient and all of the friends more than *two hundred* times. He was paid for but one prescription.

A. B. T.

September 14, 1883.

CORRESPONDENCE.

LONDON LETTER.

THERE is a dearth of medical news at present, and everybody, or nearly every leading medical man, is out of town,—a number being at the International Medical Congress, sitting at Amsterdam. The Medical Act Amendment Bill failed to complete its act of parturition, and remains not "still-born," but "unborn." The vigorous action of the threatened corporations, and notably the Scotch bodies, impeded its progress, and, though it had stanch well-wishers in the Cabinet, including the Premier himself, it foundered amidst the breakers of parliamentary factions and the disorder which the Irish Nationalist members created up to the last. We were told that if this bill did not pass there would be no more attempts at medical reform made this century: so there is little prospect of the matter being discussed again in these columns,—at least during the time the present writer is the London correspondent. Such being the case, something may be said as to the attitude assumed by him in his letters. They have created a good deal of comment, both in the United States army journals, and even at home, and the views expressed by him have not always been palatable to his critics. It was never hoped that they would be. There is much left undone that is desirable, though, also, a good deal of what is good has been done. The line taken has been that, due to causes partly outside the

profession, partly within itself, the position of the medical profession is not what it should be, considering its numbers and their individual attainments. For such readers as may hold that the writer lacks patriotism, on the plea "that it is an ill bird that fouls its own nest," it may be well to retort, "Respect begins at home." And the profession must undergo some radical transformation within itself before it will gain the position which, after all, belongs to it. A recent pamphlet has appeared, entitled "The Political Powerlessness of the Medical Profession: its Causes and its Remedies," by Balthazar Foster, the eminent Birmingham physician, which, to my mind, is full of instruction. He points out therein how the Medical Bill of 1858 was the outcome of agitation dating back to that great reform time, 1831. It took the form of a bill drafted by Mr. Wakley (of *The Lancet*) in 1840. When passed, "we won neither of the essentials demanded by the Association: neither a single mode of entering the profession, nor direct representation in the Medical Council." The plea against direct representation was the lack of a register, yet "for a quarter of a century the register has been complete, the medical practitioners of the United Kingdom have contributed from their narrow means one hundred and fifty thousand pounds for the support of a council to represent and defend the interests of the colleges in opposition to the wishes of the profession, and, as a result of our taxation, to leave us the worst-governed medical body in Europe." There is no uncertain sound about statements like these. Such was the sense of failure in the working of the council that the medical-reform committee soon had to recommence its labors. But, though strong representations were made, the council were quite indifferent to them. The medical bills were brought forward, whose fate was failure, until with some prospects the recent proposed bill was accepted. How? "Worn by the long weariness of waiting, broken by repeated disappointment and defeat, we accept this bill as the best we are likely to obtain. But surely such small results after such long labors must convince us of the political impotence of the profession to which we belong." So says Dr. Foster. He then points out what strides physiology had made since 1858, and what was being done when the anti-vivisection agitation checked the progress of experimental inquiry in Great Britain and Ireland. On this the profession was united, and Lord Sherbrooke (then Mr. Robert Lowe), as quoted by Dr. Foster, wrote, "I do not agree with you that, as matters stand now, you ought to submit to any legislation. The law is this: any person may inflict any pain short of torture on any domestic animal, and any torture he pleases on any non-domesticated animal. So long as the law stands, it is a gross insult to the medical profession to single them out as the only exception to these general rules, and I would advise them not to submit to it. People are very often taken at their own valuation, and I would never admit that you are the only persons with whose liberty it is necessary to interfere." Dr. Foster points out "that if our courage had not been broken by long years of political powerlessness, we should have followed this wise counsel and have obtained better terms." Yet the clamor is still going on for a still more stringent act. Dr. Foster goes on, "It is no wonder to me that a distinguished member of the Upper House, who once fought for us in the Commons, should have said that in all political action we doctors are such poor creatures as to be hardly worth fighting for." The recent action about the arrest of the working of "the Contagious Diseases Act (human) is another slap in the face administered to our profession by the powers that be." Yet our leaders are able men; but, as he says, "our leaders act and speak only as individuals or as the representatives of small bodies of the profession; there is no power of numbers behind them." They do not represent the huge bulk of the profession at large. They represent small parties,—colleges ruled by oligarchies. Then he points out that even the British Medical Association had not direct representation, "and has been met over and over again with the taunt of not applying the system to itself." (This is now effected by the new by-laws which were formally carried at the adjourned general meeting held in Exeter Hall on August 17.) He goes on, "When our resolutions and our petitions go forth, swollen by the chorus of ten thousand, ay, and at no distant day, by the volume of twenty thousand voices, even the dull ears of a House of Commons will be startled into an acute and respectful attention." After thus describing some of the causes of our "political powerlessness," he continues, "Let us now consider those that depend upon ourselves. As a profession we are rapidly becoming, if we have not already become, the most broadly educated class in the community." Some years ago the present Premier said there existed "an opportunity for the medical profession to exercise increased knowledge and a greater share in the leadership of thought." Dr. Foster adds, "Six years have passed since these words were spoken, and we still find the influence slow to come. This is in a great measure our own fault. As a class we are too timid and too reticent; we fail to take our due share in the public work of the communities in which we live." There can be no question as to the truth of this charge. "It will do him harm in practice," is the constant remark made upon any member of our profession who may wish to assert his right to hold an opinion of his own. This timidity, this fear of injury to practice, has made cowards of us as a body. We cannot deny the

justice of Dr. Foster's remark. But, instead of reform in this matter, he will probably only get hard words in private from those who know how true his words are and yet fiercely hate to hear unpleasant truths. Dr. Foster sees the selfishness underlying this crouching attitude, for he says, "With some of us, possibly, there may be a lurking fear that pronounced opinions on political or social questions are apt to injure a doctor in public estimation, and so to lessen his professional influence and his pecuniary profits." But, he adds, "no slavish fear of consequences need check us, for if a calling like ours, which entails so much labor and so little reward, necessitated the mean servitude of reticence from prudential motives, it would justly sink from its position of respect as a free and learned profession." Outspoken words these! He urges that those of the profession who have the time should take more part in public work, for "year by year the statute-book receives provisions, of a social and sanitary nature, that demand medical knowledge for their most effective administration. If we help in this we act for the good of our fellow-citizens, but if, from a too close devotion to work or from a selfish love of ease or from a sorry fear of making enemies, we shrink from this duty, can we be surprised that the public estimate of us sinks, and our influence everywhere fails?" Then he contrasts the few medical men in the House of Commons with the position of the profession in Germany and in France,—Virchow the leader of a powerful party, while "the probable successor of Gambetta is a doctor;" while in Italy no less than seventeen medical men are among those elected for parliamentary work. "It is our apathy and our want of courage in the past that has placed us in the position in which we now are, and I look to the rising generation of the profession to enter on a new and nobler course." This statement is a pretty complete vindication of the truth of statements made from time to time in these letters, which have provoked hostile comment.

Things are not as they ought to be in the profession in Great Britain. A certain line of conduct suits the interests of a certain class of minds, and these are studiously, yea, even remorselessly, followed. The great interests of the profession may go to the dogs, a certain class think, provided their individual interests prosper; and if any voice is raised to ask for anything else, they immediately denounce the offender in the press, if they dare; if not, they can backbite him. The difficulty of the bolder units taking the action Dr. Foster holds desirable is, not that the public would resent their coming forward in public matters, but the timid and the envious units would never cease privately to insist that such position was professionally injurious until the public would believe them. The better part of the profession is weighted over "the load-line" by the selfish element. Dr. Foster thinks this too, for he goes on, "But power will not come to those who stand aside and look on either cynically or timidly at the strife of parties. We must hold ourselves like men willing to take our share in the struggle; we must remodel our institutions; we must organize and consolidate our profession, and infuse into our ranks the self-respect and dignity that come from discipline." It is abundantly clear that a great transformation is needed before the profession can take its proper place,—a transformation of individual thought in many cases. Instead of a truckling policy which those who believe in it force more or less completely upon others who do not believe in it, and who would wish to do rightly, uprightly, and openly, we require to step out with the "sure and certain step of men."

It is, indeed, "the lurking fear of lessened professional influence and pecuniary profits" which induces the weak to combine to press down the strong; it is the rule of cowardice, of want of strict faith to each other, which has emasculated our profession and rendered it politically "impotent." An illustration of the powerlessness of the profession as a body has been furnished by the recent conflicts betwixt the profession and the nursing-sisters. The late Prof. James Symes, of Edinburgh, always asserted a weakness for the old-fashioned nurse, who was a menial (and not always above a reasonable suspicion of a liking for a drop of something now and then), as compared to the modern sister, who claims the feelings and the culture of a lady. But he, with all his foresight, probably never dreamed that the day would come when the nursing-sister would attempt to rise superior to the medical man: yet, from what has appeared in the press from time to time, it would seem that the nursing-sisterhoods, by firm combinations and alliances with members of the governing bodies, have been able to drive the profession into a corner at times. For years Guy's grand old hospital has been before the public as the seat of internal discord; though fortunately it has of late been less conspicuous for such dissension. Ugly rumors have been in circulation for some time about the condition of King's College Hospital. It was nursed by the sisterhood of St. John's House, an earnest but arbitrary body, which gave itself airs of a very unwonted order. The hospital was really under this feminine sway, and as an institution for the teaching of medicine its utility was greatly shaved down by the rules and regulations insisted upon by the dominant ladies; dressing was made as irksome as possible, and the object of instruction was sacrificed to the caprices—for they deserve no higher term—of the sisterhood. Religious enthusiasm is a very fine thing; self-devotion is noble; but the history of religious nursing-sisterhoods

teaches the sad lesson that a woman must possess a very great amount of good principle to carry safely any load of religious enthusiasm; without it the latter carries her away on a flood-tide against which she can make no effectual resistance. Self-abnegation, the merging of the individual in the aggregate, may end in the most assertive self-worship; everything may be sacrificed to formal prayers, which do not seem to carry with them the lesson of humility; spiritual pride is a noxious weed which is apt to flourish in a rank growth of religious feeling; and religious thought is not always accompanied by a commensurate growth of godly action. The attitude adopted by the sisterhood of St. John's House, unless these pious women are sorely belied, has not always been one illustrative of Christian humility, or in full and complete accordance with the lessons taught in the Sermon on the Mount. The devotion of the individual to the community is seen as much in the insect world, amidst bees and ants, as in any of the religious sisterhoods, where the workers are also sexless females,—sexless by the act of the Creator in the one case, sexless by their own will and vow in the other. The devoted sexless female is no longer an individual, she is a unit of a community; and her merging of self is complete. But the actions of these communities are not always defensible, and King's College Hospital has drifted into increasing difficulties under the sway of the sisters of St. John's House. A great portion of its invested funds has of late been sold out in order to enable the present régime to carry on its practices; and after the last annual meeting it was said that notice would be given to the sisterhood as one part of the reform which was evidently becoming imperatively necessary if the institution was not to be looked upon as being hopelessly insolvent. Further, the "aggressive attitude" of the matron had long been an offence to the staff and the students,—two not altogether unimportant matters in a teaching-hospital. "At length, however, the acme of toleration has been reached, the resignation of the matron insisted on, and, after prolonged refusal, received," says one of our medical journals. Where was the personal self-respect of the fanatic, that she could not go when her presence had become so objectionable that it was decided to suffer it no longer? How was it she clung frantically to her place, and required reiterated intimation that go she must? But a more curious chapter in the history of religious arrogance is furnished by the fact that the forced resignation of the matron was followed by the sudden withdrawal of the sisterhood without notice, so as to leave the hospital crippled. Where were their professions of Christianity and their vows upon that occasion? It is said that their amiable malignity went further than this: the nurses were called in, and, on pain of instant dismissal, commanded to resign their posts. It is quite clear that every consideration but their own wilful caprice, their own weakness, wickedness, and folly, had been flung to the winds. Prevented from doing further injury to the institution whose bane they have been for long, their last act, like the fleeing Parthian's arrow, was to try to inflict a grievous wound on the institution by leaving it utterly helpless. "All honor, be it added, to the nurses who, notwithstanding the absence of pretensions claimed by 'lady' nurses, remained with true womanly pity at their posts beside the beds of suffering patients, while their cultivated 'superiors' followed in the wake of the indignant matron." The journal continues, "Spite of the temporary inconvenience, the authorities of King's may congratulate themselves on a good riddance of women who could be guilty of so grave a dereliction of duty; and there can exist no doubt that this exhibition of feminine malice has done a great deal to alienate the sympathies of the right-feeling section of the supporters of these sisterhoods." Another journal, commenting on the action of the matron and sisters in their impish malice in trying to cripple the hospital as their final act, says, "The whole circumstances illustrate the danger of handing over the nursing of a hospital to a foreign power, and the difficulties resulting from the exaggerated pretensions of some nursing-sisterhoods." Yet, despite these outspoken judgments, in harmony with notorious facts, it is curious to see a letter from one of the supporters of the ladies, in this journal: "Sir, you are incorrect regarding your statements concerning the lady nurses at King's College Hospital, as they were discharged in the most unjust and peremptory manner, and at great inconvenience to themselves, by the members of the Council, merely because a little since the matron, Sister Aimée, reported a case of supposed irregularity by a doctor towards one of the patients. I speak as a parent of one of the lady nurses.—M.D." Poor victims! martyrs to a sense of duty! "Supposed irregularity." It might have been as well, possibly, if she had been sure of her ground.

This piece of meddlesome impertinence is the plea, then, for the grossest ill usage to those unoffending creatures. We see "asinine paternal pride" in many of its phases; but what can be expected of the social position of medicine when such traitors are in its ranks as this M.D.? His intellectual spectacles are sadly chromatic, I fear; his duty to his profession a poor withered limb compared to his fatherly interest in his "lady-nurse" daughter. He would have done much better if he had adopted the old plan, "whipped her and put her under the pump," than inditing such a pitiable production. Perhaps, after all, our position is quite as good as we deserve.

J. MILNER FOTHERGILL.

PROCEEDINGS OF SOCIETIES.

THE AMERICAN GYNÆCOLOGICAL SOCIETY.

THE American Gynæcological Society held its eighth annual meeting at the Hall of the College of Physicians, Philadelphia, September 18, 19, and 20, holding morning and afternoon sessions. Gilman Kimball, M.D., of Lowell, Massachusetts, President of the Society, and Albert H. Smith, M.D., Vice-President, occupied the chair during the meeting. The membership of the Society is limited to sixty Fellows, about half of whom were in attendance, besides a number of invited guests and members of the profession. The papers read were up to the standard, and the discussions were able and spirited. After the morning sessions lunch was provided by the resident Fellows, and on Thursday evening a supper was given at St. George's Hall, by the Philadelphia Obstetrical Society, which passed off pleasantly. Altogether the meeting was declared to be as successful and satisfactory as any which had been held by the Society.

FIRST DAY'S PROCEEDINGS. — *Morning Session.*

The President called the meeting to order, and the Secretary recorded the following names as present: Fordyce Barker, New York; Robert Battey, Georgia; B. B. Browne, Baltimore; William H. Byford, Chicago, Illinois; J. H. Byrne, Brooklyn, New York; Henry F. Campbell, Augusta, Georgia; James R. Chadwick, Boston, Massachusetts; Edward L. Duer, Philadelphia; T. Addis Emmet, New York; Frank P. Foster, New York; William Howard, Baltimore; J. V. Ingham, Philadelphia; A. Jackson Reeves, Chicago; J. T. Johnson, Washington, D.C.; Gilman Kimball, Lowell, Massachusetts; W. T. Lusk, New York; Matthew D. Mann, Buffalo, New York; C. D. Palmer, Cincinnati, Ohio; Theophilus Parvin, Philadelphia; Thaddeus Reamy, Cincinnati; J. C. Reeve, Dayton, Ohio; Albert H. Smith, Philadelphia; R. S. Sutton, Pittsburg, Pennsylvania; Ellwood Wilson, Philadelphia; H. P. C. Wilson, Baltimore; Ely Van de Warker, Syracuse, New York. Some others were in attendance later whose names do not appear.

An Address of Welcome on behalf of the resident Fellows was delivered by Edward L. Duer, M.D. The Secretary read a communication from the Council announcing that the following had been made members by invitation: Alfred Stillé, M.D., President of the College of Physicians of Philadelphia; William M. Welch, M.D., President of the Philadelphia County Medical Society; Richard A. Cleemann, M.D., President of the Philadelphia Obstetrical Society; James Tyson, M.D., President of the Philadelphia Pathological Society; Robert P. Harris, M.D., of Philadelphia; and I. R. Page, M.D., and Robert T. Wilson, M.D., of Baltimore, Maryland.

Superinvolution of the Uterus.

The first paper read was by Joseph Taber Johnson, M.D., of Washington, D.C., upon superinvolution of the uterus. He said that although this morbid condition was recognized and described thirty years ago by Sir James Simpson, and is not an uncommon affection, yet it is infrequently referred to in text-books. Frommel found that it was present in about one per cent. of gynæcological cases, and Simpson thought that the number of cases would be found to be much greater if they were properly looked after. It is to be differentiated from atresia of the uterus, undeveloped uterus, or one which has been changed by inflammatory processes. The condition of superinvolution is one of excessive action of the physiological processes of involution occurring after the cavity of the uterus has been distended by any growth, normal or abnormal: thus involution to an exaggerated degree may follow parturition or abortion, hydrometra, physometra, hydatids, the removal of large fibroid tumors, etc. He reported four cases in his own practice.

Case I., aged 26, commenced to menstruate at 14 years of age, and continued to do so regularly until she became pregnant, five years ago, and was delivered with the forceps; the child was still-born. On the third day symptoms of septicæmia developed, and a laceration of the cervix and perineum was found, but no metritis. She subsequently made a good recovery, except that she had an offensive leucorrhœa and sick headache at her menstrual periods. After two years had passed, her abdomen began to enlarge, and she supposed herself pregnant again, and made the usual preparations; her headaches now were relieved. About the time that she expected her confinement the abdomen rapidly decreased in size, and the tumor disappeared. Her menses had not appeared since her former pregnancy, although her health was good and she had gained flesh. Upon examination the uterus was found to be less than two inches in depth; the edges of the laceration had never healed. He performed trachelorraphy last year; the operation was successful in curing the offensive leucorrhœa, backache, and headaches, and in restoring sexual appetite. The general improvement was marked, but the menses have not returned, although electricity and the ordinary treatment were employed. She has now the appearance of robust health, although she does not menstruate. Simpson and others class these cases as invalids, and as subject to nervousness, and predict early death. Her case is an exception to this rule.

Case II., now 30 years of age, had been married ten years, and had a miscarriage

several years ago, from which she made a good recovery. In addition to this history, she reported that four years ago her abdomen had swelled, and afterwards she discharged a large amount of water from the vagina. At the time she consulted the reporter her periods only lasted for one day; sexual appetite was preserved, and she was anxious to have a child. The uterus was found to measure less than two inches in depth. Electricity, massage, and the usual treatment was followed, but without marked success; her menstrual period extended to seven days, and then, after coitus, stopped for several months, when she thought herself pregnant again, but she was disappointed. No benefit was derived from the treatment.

Case III. menstruated at her seventeenth year. She was 29 years of age, and had been married five years, but had never been pregnant; it was, therefore, not truly a case of superinvolution, as no history could be obtained of distention of the uterus, but her appearance was exactly like the preceding case. The uterus seems insensitive, freely movable. Having speared it with a sharp knife, applied electricity, etc., no marked result was obtained.

Case IV. was a patient in the Provident Hospital. She had had two children, both of whom died, and she was anxious for another. Her periods lasted only a few hours. The uterus measured only one and three-quarter inches; it was, like the others, insensitive. Nothing was obtained by treatment. It was evident that she had reached the climacteric prematurely; none of her family, however, so far as she knew, had changed at such an early age.

The results of these four cases are certainly not encouraging, but they are as good as those obtained by others. Simpson reported several cases with like results. Whitehead reports a case in which the uterus and ovaries completely disappeared after labor. Scanzoni recognized atrophy of the uterus after labor. Prolonged lactation has also been assigned as the cause by Frommel. It could not have been the cause in two of these cases, because in one the child was still-born, the other was a miscarriage. Dr. Edes considers that in some cases it is the natural result of parturition: the reproductive powers have been exhausted by one supreme effort. From whatever cause it may arise, this condition exists, and should be recognized: electricity should be tried for its relief, but the cases are usually incurable.

DISCUSSION.

Dr. Fordyce Barker, of New York, being called upon by the Chair to open the discussion, said that with regard to the term superinvolution, some authorities would restrict its use to a reduction in the size of the uterus below the natural size of the organ, after conception. He thought it perfectly proper to apply the term to any case in which this process occurs to an extreme degree, as after the removal of fibroid tumors, false conceptions, or other objects within the uterus. It seemed to him as if it might also be applied to some cases of uterine catarrh in which these identical changes have occurred, and, in fact, to all cases where retrograde processes have gone on to an abnormal extent. With regard to its frequency, the practitioner with a large consulting-practice will be likely to see a greater number of these cases than other physicians. He believed that he saw two or three cases every year.

He would, in conclusion, refer to another point not mentioned by the writer of the paper, but which had been taking form in his mind for several years. He had never published it, but had mentioned it to friends; he had never seen it referred to in medical literature. In making his decision whether we shall allow the patient to undertake the expense of treatment, he always took the precaution to examine into the condition of the ovaries,—if they are associated in the diseased condition and are atrophied or defective, or if they are active in their functions. If the latter is the case, and at each monthly period there is great systemic disturbance, there is an effort of nature to relieve the plethora of the pelvic organs, the patient will be one who will be benefited by treatment; the others, where such nervous symptoms are absent, will not be benefited. He cited the following case. A lady 24 years of age, the wife of a physician, owing to an accident, being in a carriage during a runaway, had an abortion at the sixth month of pregnancy. About two months later, when menstruation should have returned, there was great constitutional disturbance, backache, etc.; but there was no discharge. She was a large, strong woman, weighing 208 pounds, and in apparent health. On examination, the uterus was found to be small, extremely small, and the cervix did not show the slightest evidence of a past pregnancy. She was kept under treatment; electricity was systematically applied, the cervix was dilated with bougies, and she was given a pill containing ox-gall, aloes, sulphate of iron, and other remedies as needed. After three years' treatment she became pregnant, and he delivered her of a living child with the forceps.

He recalled another case of a lady, who, while travelling in Europe, from over-fatigue had a miscarriage, which was attended with great hemorrhage. She never menstruated afterwards, although for several days each month there was great disturbance of her nervous system, each period terminating in a sharp attack of diarrhœa. After being put on a similar course of treatment, she also became pregnant and was delivered of a living child.

The main point in the prognosis and in the treatment is to discover whether the superinvolution of the uterus is accompanied by loss of the function of the ovaries, or is associated with active ovaries: in the latter condition, the uterus may be restored; where this is not the case, treatment is of little use.

Dr. A. Reeves Jackson, of Chicago, was surprised at the statements of the paper as to the comparative frequency of this condition. He had himself seen only a single case, and that was of doubtful diagnosis. Several years ago, a woman was admitted to the hospital with which he was connected, in Illinois. She was 32 years of age; her youngest child was five years old. She had been obliged to feed the child artificially because of insufficient lactation, and had weaned him entirely at five months. When she came under observation, the breasts were flabby and withered, the skin on her neck was wrinkled like an old woman's. There was very marked atrophy of the uterus, even more than usual in senile atrophy; the ovaries could not be detected at all. He finally succeeded in passing a probe through the very small os, but was surprised to find it pass in several inches: he discovered, to his dismay, that he had penetrated the fundus uteri. He did not know at that time that this accident is neither very rare nor very dangerous; in this case it produced no bad symptoms. He afterwards inserted a galvanic stem-pessary, but without results. Here is a case of difficulty in diagnosis: was it a case of premature climacteric? He thought that this might not apply to many cases, however. But here the atrophy of the uterus is due either to superinvolution or to premature menopause. The practical point in diagnosis submitted by the last speaker is well worthy of consideration.

Dr. Ely Van de Warker, of Syracuse, called attention to a possible source of error in diagnosis in superinvolution of the uterus. After laceration of the cervix there is often marked atrophy of the cervix, which does not extend to the fundus. He had never seen it except as the result of laceration. The length of the cavity of the uterus itself remains unaltered, but that of the cervical portion is very much reduced, and more in the posterior than in the anterior lip. Why it should be more marked posteriorly than anteriorly he could not say. He could easily see how a large proportion of the cases reported as superinvolution of the uterus might be of this character, and was inclined to think that one of the cases mentioned in the paper was of this character.

Dr. H. P. C. Wilson, of Baltimore, regarded the condition as extremely rare: in all his practice he had seen only two or three cases. He endorsed the remarks of Dr. Barker as to the distinction between those who can be benefited by treatment and those who cannot be. Where the ovaries are not active he had not been able to get the slightest benefit from treatment, but in the others, where the ovaries remained normal, he had been able to benefit his cases.

Dr. Robert Battey, of Georgia, confirming the remarks made by Dr. Barker, said that atrophy of the uterus is a constant result of the operation with which his name had been connected. In most of these cases of oöphorectomy the uterus is not diseased, but is healthy; but its function is interrupted by the operation. He believed that superinvolution of the uterus is due, therefore, rather to disease of the ovaries than of the uterus, because he has known this to occur very commonly after removal of the ovaries. He had never seen it follow removal of the Fallopian tubes alone, and in this view differs from Lawson Tait; indeed, he doubts if it ever occurs from simple removal of the tubes.

The best remedy is electricity, applied so as to pass the current through the ovaries rather than to the uterus itself. Dilatation of the cervix with sponge tents should also be commended.

Dr. William H. Byford, of Chicago, said that he had listened with interest to the communication of Dr. Johnson because it is on a subject which has not been exhausted by the profession. He thought that great confusion and want of distinct knowledge obscured the whole question at present. He inquired, Is there any difference between superinvolution and atrophy, or is superinvolution a step on the road to atrophy? He believed himself that a decided difference exists between superinvolution and atrophy, although in the great number of cases it is merely a stage in this process. He would consider superinvolution as a condition in which the uterus preserves its normal characters and its normal functions, though reduced and dwindled in size. He agreed with the first speaker that the cases should be divided into the simple form, involving the uterus alone, and the complicated, in which the ovaries participate; for although the process may go on in both *pari passu*, yet it may go on to a much greater extent in the uterus than in the ovaries. He believed that if the ovaries should become very much reduced from superinvolution, the uterus necessarily becomes so. He also agreed with the statement that when the ovaries partially retain their functional activity the case may be cured. Wherever the symptoms indicate that the ovaries are still active, we may get the best results from treatment; when these symptoms are absent, no hopes can be entertained. He believed that the time would come when, in the development of our knowledge of these processes, what superinvolution is and how it is brought about will be better known than it now is. In the mean time, the treatment mentioned, with the use of a pessary to keep up irritation between the periods, in the hope of stimulating local congestion, might be of service.

Dr. Henry F. Campbell, of Augusta, Georgia, said that he did not consider it necessary to the existence of superinvolution that there should be either atrophy of the ovaries or atresia of the uterus. He referred to a case in which there had been extreme distention, which was sufficient to cause barrenness, although ovulation apparently continued. He was called in consultation to see a case in which the attendant physician declared himself unable to determine whether the fluid was in the peritoneal cavity or in the uterus. The woman was about six months pregnant. She had an immense abdomen, and it was very tense. The woman was obliged to lie upon her side on account of this enormous collection of fluid, and her condition was serious. He determined to bring on premature labor, and did so, and a fœtus was discharged, with about a pint of amniotic fluid. Fearing that they had made a mistake, they were preparing to tap the abdomen with the trocar, when, upon making a preliminary vaginal examination, another bag of water was found protruding from the uterus, which evidently contained a blighted twin fœtus, with dropsy of the amnion. The membranes were punctured and gallons of water were expelled. The patient rapidly recovered. Although she had had children regularly every fifteen or eighteen months before this occurred, she never conceived again; yet the menstrual nisus and menstrual discharge continued. The ovaries continued physiologically active, but the woman never became impregnated again. The theory on which he had accounted for this sterility was that the over-distention of the uterus had resulted in a loss of muscular power, just as over-distention of the bladder sometimes causes permanent weakness and impairment of function. He inquired if this theory might not account for some cases of barrenness after extreme distention of the uterus, without reference to the ovaries.

Dr. Johnson, in closing the discussion, accepted the point raised by Dr. Barker, which seemed to be an important one, both in diagnosis and in treatment. There is a difficulty, however, in dividing the cases absolutely, but their condition at the menstrual periods will serve as a guide as to whether the ovaries are active or not.

The distinction made by Dr. Van de Warker he coincided in, and he had been of the opinion himself for a long time that the case referred to was really one of atrophy of the cervix; but such cases usually recover after trachelorraphy, and menstruation returns. It was not so in her case, although her health is robust and the operation was successful in restoring the parts.

In reply to Dr. Jackson, he said that he had not claimed that it is very frequent, but that it occurs often enough to demand our attention. Dr. Byford's division is essentially that of Dr. Barker. The treatment recommended was that which had been pursued, and which he would continue, and will report further results at a future meeting.

The Importance of Cleanliness after Surgical Operations.

R. Stansbury Sutton, M.D., of Pittsburg, read a paper, in which he gave the results of his observations while on a visit to some of the great clinics in Europe. He directed especial attention to the fact that a great change had taken place in surgical methods within a few years, and this is especially evident in the cleanliness which surgeons everywhere endeavor to secure during surgical operations and in the treatment of wounds. Formerly it was thought that all the bad influences came from within, and wounds were left open and encouraged to discharge freely, in order to purge them. Now there is a return to the earlier treatment of Galen, and wounds are closed and protected as much as possible from outside sources of infection. The cell theory led naturally to the germ theory of disease, and, as the microscope kept pace with progress, organisms were detected in the discharges from wounds, and these were regarded as noxious agents.

The object of the treatment introduced by Lister was to keep these septic organisms out of wounds, and he introduced carbolic acid and insisted upon cleanliness. The result of his teachings is that surgery has achieved better results than ever before; and yet the most active opponents of Lister are those who adopt his principles of treatment, simply modifying it by omitting the spray, or substituting other agents for carbolic acid. He denied that carbolic acid is synonymous with Listerism, or even necessary to it. Some antiseptic may be found that is better for the purpose; it is not essential. Strict attention to cleanliness in all the details of the operation, in order to keep the wounds aseptic, is the great principle of Mr. Lister's treatment. Keith is such an expert in cleanliness that he can dispense with carbolic acid; and Lawson Tait exercises the greatest care to prevent infection of wounds, so that he also can dispense with this agent and yet have good results. German surgery was formerly considered extremely dirty; now a visit to the operating-rooms of Esmarch, Volkmann, Schroeder, Nussbaum, Koeberle, and others will show the most minute attention to cleanliness, although various minor modifications of the Lister treatment have been made. Listerism, or something else, has taught them the necessity of cleanliness.

DISCUSSION.

Dr. Barker asked the Chair to call upon Prof. Gross, the Nestor of American surgery, to open the discussion, as he was in the room.

Prof. Gross said that he was much obliged to the Society for the honor, but he must decline,

as he had come merely to listen and be instructed, and not to talk.

Dr. T. A. Emmet, of New York, in response to an invitation from the President, stated that he had nothing to add to the statements in the paper; he agreed with the lecturer perfectly. He had previously expressed the opinion that the death-warrant of the patient is too often carried under the finger-nail of the surgeon; and, since he had been abroad on a visit to the clinics mentioned, he had trusted to soap and water in preference to other antiseptics. The operator may keep himself clean, but it is very difficult to control the assistants. Lawson Tait even goes so far as not to allow any one to touch the wound or the sponges that he uses except himself, and declines the aid of an assistant.

Dr. Wm. T. Lusk, of New York, said that the paper that had just been read contained statements that would be accepted by the most ardent Listerite. He would, however, take exception to the remark that the carbolized spray should not be used unless the surroundings are impure. He thought that the danger of the spray had been exaggerated. Cleanliness, of course, is required, but, in addition to ordinary cleanliness, Mr. Lister aimed by his methods to exclude impalpable causes of disease by the use of carbolic acid. Though micrococci resist five-per-cent. solutions of carbolic acid, yet the bacteria which cause putrefaction are destroyed by this agent. He could not feel prepared to give up the spray, as he had used it successfully in operations at the hospital which he would not dare to perform without it, as such operations previous to the use of the spray were generally fatal. He had operated for ovariotomy at Bellevue Hospital in a tainted ward with perfect success under the spray, although some of his colleagues were of the opinion that under ordinary circumstances it would be simply murder. Last winter he had operated upon four cases, all presenting peculiar difficulties: in only one of them was there a rise in temperature as high as 102°, and that only for a few hours. He believed that he could not obtain as good results without the spray as with it.

Although the lecturer states that all of Keith's cases in which the spray was used died, and all those operated on since recovered, it does not follow that they died because of the spray. He could not forget that when he visited Keith, some years ago, when he had reached his forty-fifth successive successful case of ovariotomy *with the spray*, he got out his case-books to prove that the London men must come to the spray. He also stated that, whereas before the use of the spray he felt obliged to visit his patients three or four times a day, since employing it he only was obliged to visit them once a day. Certainly, very much must be attributed to experience in operating: this is the secret of Mr. Bantock's success. Mr. Lawson Tait carries out all the details of the antiseptic treatment, except cleanliness. After watching him operate, one can only arrive at one conclusion,—his exceptional results are due in great amount to his personal skill and address. In removing the ovaries he makes an incision only three-fourths of an inch in length; adhesions are torn up by the finger. He operates very rapidly, requiring only a few minutes: the result is that there is very little shock, and one of the principal conditions leading to septicæmia is wanting. While such an operator may safely do without the spray and other details of Listerism, yet for operators of less skill, and under less favorable conditions, the spray is still needed.

Dr. Wilson, of Baltimore, said that the profession owes a great debt of gratitude to Mr. Lister, and he had been surprised to find gentlemen crying out against Listerism and at the same time using all the details of Listerism except the spray. He had the pleasure of seeing Mr. Keith operate lately, and this operator told him that no woman ought to die of ovariotomy if she came for treatment sufficiently early. The greater success from the operation lately may be due to the fact that patients are willing to have the operation performed, instead of putting it off until they are ready to die. He thought it possible to use too much carbolic acid, and, on account of this, he does not employ the spray during the operation, but before it, in order to purify the air. Mr. Keith said that he was struck more and more with the wisdom of Lawson Tait in not having many assistants. The surgeon cannot be responsible for his assistants, although he may be clean himself.

Dr. Campbell said that surgeons were careful with regard to their patients before Mr. Lister talked about carbolic acid at the International Congress, and he thought it a great injustice to ascribe all cleanliness, past and present, to any one man. His statistics of amputations are as good as those of the surgeons who use carbolic acid, and he mentioned a case in which blood-poisoning and delirium were caused by carbolized solutions.

Dr. Sutton, in closing the discussion, protested that carbolic acid is not essential to Listerism, and believed that in abdominal surgery it had done more harm than good.

In reply to Dr. Lusk, he said that the statement that Lawson Tait uses Listerism, except the spray, was incorrect. He does not use a single drop of carbolic acid for his operations. The only antiseptic that he uses is boiling water; and, instead of using carbolic acid for his sponges, he carefully washes it all out in clean water before operating. The speaker believed him to be perfectly honest in his antagonism to Listerism.

Tait and Bantock, of the Samaritan Hospital, stand alone in their opposition to carbolic acid, and he would not hesitate to say

that he thought that the day of the carbolic acid spray is over. As far as the object of disinfecting the room is concerned, the spray is simply worthless: if the floor be sprinkled, so as to keep the dust from rising, it will be more to the purpose.

The question of assistants is very important. Keith has only one, Tait very few, Billroth very many. There is also a great difference as regards the character of the cases. Billroth operates upon everything that deserves a chance of life. Some others, on the contrary, select their cases carefully. He, therefore, would place no reliance on statistics, in this class of operations particularly.

Afternoon Session.

The following were made members by invitation: Prof. S. D. Gross, of Philadelphia; R. P. Maury, M.D., of Memphis, Tennessee; and W. P. Chunn, M.D., of Baltimore.

Hot Water in Secondary Hemorrhages after Pelvic Operations.

Dr. Albert H. Smith read a paper advocating the hæmostatic properties of a stream of hot water after operations on the pelvic organs, as well as to prevent post-partum hemorrhage by using it immediately after the placenta has been expelled. He had found that hot water would check hemorrhage even in a hemorrhagic diathesis, and expressed surprise that Dr. Skene had considered this a contra-indication to certain operations. The following points he submitted for discussion: (1) the great superiority of the hot-water douche over all other means of arresting hemorrhage; (2) its efficiency when carried directly to the bleeding surface; and (3) its simplicity.

DISCUSSION.

Dr. Reamy said that he was in the habit of irrigating the surface with a stream of hot water during operations upon the perineum, thus avoiding the use of sponges.

Dr. H. P. C. Wilson approved of the use of hot water for the purpose named both in pelvic operations and in post-partum hemorrhage. He referred briefly to a case in which he had saved a patient's life by its use, where free bleeding had followed removal of both ovaries through Douglas's cul-de-sac; he had injected gallons of hot water, washing out large clots from the abdominal cavity, and had succeeded in stopping the bleeding.

Dr. Campbell recalled a case, many years ago, of vesico-vaginal fistula in which he had to relinquish the operation on account of the hemorrhage. He thought that with the aid of hot water he might have finished it, but he did not know of its use at that time. In post-partum hemorrhage he uses warm water to wash out the uterine cavity, and then injects iodine. He called attention to an instrument—the metroclast—which has a sort of wire cage around the long nozzle of a Davidson syringe. By this expedient the water is allowed to escape as rapidly as injected.

Dr. Mann said that he had used it a great deal in post-partum hemorrhage and after removal of fibroid tumors with success, but he had a case two years ago where the injection of hot water failed to stop the bleeding. It was a case of cancer of the cervix, in which he had removed the intravaginal portion of the cervix and had checked all bleeding; but, seeing a small piece that he thought should be removed, he snipped it off with the scissors, and free bleeding followed. He injected vinegar and hot water, but without the slightest effect. He tamponed, with no better success. He then applied Paquelin's cautery, and stopped the bleeding, but the patient was exsanguine, and died in ten minutes. Dr. Mundé had a similar case, both being reported at the New York Medical Society on the same evening.

He would not dispute the value of hot water as a hæmostatic, but thought that we should not place reliance upon one form of treatment alone.

Dr. Goodell thought that Dr. Mann had asked too much of the hot water, as the hemorrhage was evidently from a large-sized vessel. He had found it extremely valuable where oozing occurs, especially after ovariotomy. He thought it effective even beyond the limit of its actual contact, for in cases of menorrhagia it will check the bleeding, although only thrown into the vagina. Vinegar, on the contrary, must reach the bleeding surface in order to do good. He would consider hot water as having a double advantage in its local and its indirect action. For open wounds he prefers vinegar, and in post-partum hemorrhage he uses hot vinegar.

Dr. Barker called attention to one point of importance in attempting to decide whether hot water is the best agent to use in a given case or not. The hot douche requires some time—ten or fifteen minutes—to check bleeding; in some cases a more prompt hæmostatic would be needed to save life. He mentioned a case of hemorrhage from laceration of the vagina which resisted hot water for half an hour, and one of cancer of the cervix where bleeding persisted in spite of the hot water. In the latter case he applied a compress dipped in Squibb's ergot, and a tampon, which stopped the bleeding.

Dr. Byford fully concurred in the conclusions expressed in the paper.

Dr. Campbell said that he was reminded that there are cases in which it is important to decide the greater appropriateness of one hæmostatic over another. In cases of post-partum hemorrhage, anything that will stimulate the muscular fibres of the uterus to contract will stop the bleeding. In cancer it is different: here a styptic would be necessary. Iodine would be of no use in cancer, because it is not a styptic; but it is useful in post-

partum hemorrhage, because it stimulates the uterus and causes contraction.

Dr. Smith said that with regard to Dr. Mann's case he would say that he had had a precisely similar case in which the hot water was used successfully. In order to get the desired effect, it is necessary to have the hot water reach the bleeding spot; if profuse, the bleeding may prevent the hot water from reaching the spot. In such cases it is necessary to elevate the hips of the patient, so that the blood may gravitate to the upper part of the body: then the bleeding becomes less, and the hot water acts better. He would not claim that there might not be cases in which it would be inapplicable, as no remedy in medicine can be used in all cases without exception. He simply called attention to the simplicity, convenience, and efficiency of hot water. In reply to Dr. Goodell, he thought that the principle was the same whether the hot water was used with vinegar or with any other agent, such as carbolic acid or Labarraque's solution.

With regard to having a more prompt hæmostatic, he would be very glad to get one, but he had never seen anything in the use of ergot to warrant its substitution for the hot water. In reply to Dr. Campbell, he would state that he had seen cases after labor where the uterus contracted firmly, but blood spurted away in a stream as large as a goose-quill, and it was stopped by hot water. He thought that this remedy, though perhaps not available on all occasions, is valuable, easily applied, and rarely fails to check hemorrhage.

Some Points connected with Dysmenorrhœa.

C. D. Palmer, M.D., of Cincinnati, said that dysmenorrhœa is a common affection, and troublesome to treat, and should therefore have its pathology well understood. He gave a brief review of the mechanical theory of Mackintosh, Simpson, Simes, and others, and stated that while obstructions undoubtedly do exist and may give rise to painful menstruation, he believed this to be the case in comparatively rare cases. The objections to the mechanical theory of dysmenorrhœa are (1) the want of uniformity between the cause and effect, the same amount of obstruction giving rise to different symptoms in different cases. The most severe sufferings may attend a condition of the canal which admits the passage of a moderate-sized sound, or which may show no stenosis whatever. In those where the local obstruction is the greatest the symptoms are often less marked than others affected to a slight degree, and the pain may reach its climax without there being anything in the uterine canal to account for it. (2.) Constitutional treatment is more effective than local measures: chalybeate tonics and agents which increase the flow of blood relieve the pain rather than increase it. (3.) The course of the menstrual blood may be as uninterrupted in a curved uterine canal as in a straight one, but congenital cases of flexion are attended by dysmenorrhœa, but similar conditions coming on in adult life rarely are. (4.) There are cases of dysmenorrhœa in which no fault of conformation can be detected in the uterus or any of its surroundings. On the other hand, atresia may exist without pain. From these and other considerations he concluded that the mechanical theory of dysmenorrhœa was not demonstrated.

Dysmenorrhœa is, therefore, a functional disorder of the uterus which is at its base a neurosis. It is especially due to bad inheritance, poor hygiene, and vicious methods of education.

In treatment, he recommended local measures to reduce the extreme sensitiveness of the uterine mucous membrane, such as dilatation by bougies, and various applications, also electricity. In addition, constitutional treatment is required by open-air exercise, good food, iron, arsenic, phosphorus, nux vomica, quinine, etc. He believed that stenosis is more frequent at the outer than at the inner os, and this explains the greater frequency of barrenness than of dysmenorrhœa. It is easier for the menstrual fluid to escape than for the spermatic fluid to gain entrance. As in these cases the retention of the menstrual fluid may cause secondary changes, it is better to dilate early. He preferred dilatation by bougies to incision, which has been too much relied upon and has been overrated. Time has fixed the value of incision of the cervix, and has greatly limited its range of application.

DISCUSSION.

Dr. Chadwick agreed with the author of the paper: he had to a very large extent given up the idea of obstructive dysmenorrhœa. He rarely used incisions except in cases of constriction of the canal at the external os. The dysmenorrhœa of many women is due to spasmodic contraction of the uterus from peristaltic action of its muscles, from some local cause of irritation, such as catarrh, just as is seen in fissure of the anus; in others the disease is purely a neuralgia. When the neurotic element is strong he gives before each menstrual period bromide of sodium (gr. xx, three times a day), and during the attack he gives fluid extract of coca and ammonium chloride. He never gives such patients morphia.

He had not for many years met with a case in which dysmenorrhœa was due solely to flexure of the uterus, but he had found this condition coexisting, both being due to imperfect nervous development.

Dr. Barker said that he fully concurred in the views of the author of the paper. He believed that the proportion of cases with dysmenorrhœa due to obstruction is very small. Some women suffer with dysmenorrhœa until they are married and bear chil-

dren, but never after; in others this is not the case.

It is important to inquire what the pain is like. There are two forms of dysmenorrhœa: one is referable to the state of the uterus at the time; the other belongs to the ovaries, it is ovarian in its origin, and requires attention to them for its cure. We must recollect that menstruation involves two processes,—first, rupture of a Graafian follicle, and, secondly, rupture of the capillaries in the uterine mucous membrane,—one ovarian, the other uterine. Where the pain decidedly precedes the flow, it is ovarian; where it continues during the flow, it is uterine.

Every year he sees cases of young girls who come from the country to school in New York City to finish their studies. After three or four months they suffer with dysmenorrhœa, and the flow is scanty. Here the pain usually precedes the discharge, showing the effect of lowered vitality upon the ovaries.

In the treatment he most frequently employs lactate of iron (gr. iii–v, s. t. d.), generally associated with chlorate of potassium, which exerts a special effect upon the pelvic organs, commencing this about ten or twelve days before the menstrual period. The time to give it is when the patient shows symptoms of constitutional disturbance: she is irritable, nervous, languid, over-sensitive, has pain in the eyes, etc. In the interval he gives apiol, two capsules after each meal, which he regards as almost a specific. Where the patient has strong vitality, is robust, and shows too much ovarian excitement, he gives bromide of sodium between the principal meals and at bedtime. This class of cases is one which includes young widows, patients who never suffered from uterine trouble before or during marriage, but exhibit great ovarian excitement afterwards. Nothing can be found to explain it upon vaginal examination. The sodium bromide he prefers to the potassium salt, as it is less likely to cause an eruption upon the face, a matter of some moment to young women.

Second Day.—*Morning Session.*

Gilman Kimball, M.D., of Lowell, Mass., delivered the annual address of the President, taking for his topic a *Biographical Sketch of Dr. Nathan Smith, of Vermont, the Founder of Dartmouth Medical College.* He paid a generous tribute to the personal worth and professional attainments of Dr. Smith, who, in July, 1821, performed the second successful case of ovariotomy that had ever been done in this country. As he was not aware that McDowell had preceded him in the operation, it was entirely original with him, and in point of merit he stands equal to McDowell, and should have equal honors.

Prof. Gross, being invited to make some remarks, said that, nearly thirteen years having elapsed between the operation of McDowell and that of Smith, the latter operator had abundant time to have learned of the former operation, and should have known of it, as an account had been published in 1816. He thought that one of the greatest of Dr. Smith's achievements was the bringing into the world of Dr. Nathan R. Smith, of Baltimore.

Dr. Kimball explained that intercourse between the East and the West was difficult and slow at the period to which he had referred, and it was possible that Dr. Smith knew nothing of the earlier operation, and the speaker fully believed that he did know nothing of it.

A Rare Form of Abdominal Tumor.

Dr. Thad. A. Reamy described three cases of a rare form of abdominal tumor. Upon examination they were discovered to be cystic, containing bloody fluid in two cases; the other case died, and at the post-mortem sarcoma of the omentum was discovered. This raised the question whether or not the other cases, which now enjoy good health, would have become sarcomatous if not tapped, or whether the other one had degenerated into a sarcoma. He presented the specimens taken from this patient, from which it would appear that it had been originally a cyst of the omentum, in the walls of which sarcomatous tumors had developed. The patient had died from rupture of this cyst into the peritoneal cavity, causing peritonitis.

DISCUSSION.

Dr. Sutton, of Pittsburg, concurred in the statement of the rarity of these tumors. He did not think it possible before the abdomen is opened to decide whether an omental tumor is carcinoma or sarcoma. He considered it bad treatment to plunge a trocar into the collection, and advocated abdominal section, but thought there was little hope of prolonging the life of the patient if the growth be either carcinoma or sarcoma: one is as malignant as the other. He believed that when the exploratory incision reveals a malignant growth the abdomen should be closed and the operation abandoned.

Dr. Campbell said that as omental growths are usually pedunculated he thought it worth the risk to remove such tumors after the exploratory incision had been made and there were no extensive adhesions.

Dr. Reamy, in closing, said that he could not quite agree with Dr. Sutton as to the impropriety of tapping, and called attention to the fact that the two which were tapped recovered. He said it was a curious fact that in the patient with the sarcomatous growth no cachexia was present; the other two cases could not have been sarcomatous, because they recovered.

Congenital Fissure of the Female Urethra, with Exstrophy of the Bladder.

Henry F. Campbell, M.D., of Augusta, Georgia, presented a paper in which he described a case of congenital fissure of the urethra in a little girl two years of age, with exstrophy of the bladder, which appeared as a vascular tumor in front of the urethra. The upper wall of the urethra presented a flattened appearance; there was but very little trace of a lateral border. The other portions of the vulva were normal, and there was no deficiency in the pubic bones. He regarded the case as analogous to the condition of hypospadias in the male. He inquired as to the proper time for operation, and whether it would not be better to wait for the development of the parts at puberty. He feared that an immediate operation might interfere with the development of the parts, by removing portions of tissue which were susceptible of development.

Dr. B. B. Brown, of Baltimore, described a similar case, complicated by the presence of a stone in the ureter. The child died before operation.

A Study of the Etiology of Perineal Laceration, with a New Method for its Proper Repair.

T. A. Emmet, M.D., of New York, after referring to the fact that he had devoted considerable attention for a number of years to the subject of perineal laceration, said that he was convinced that its effects had been much overestimated. The suffering ascribed to laceration of the perineum is not proportionate to the extent of the lesion, and some of the severest cases are entirely unaccompanied by symptoms. He directed special attention to the anatomy of the pelvic fascia, showing its attachment to the pelvic organs and to the inlet of the pelvis, and declared that these organs are held in place by this fascia, which is continued downward as a sheath for the vagina. During labor this fascia may be injured or lacerated: when this condition occurs, perineal laceration often follows in the descent of the head and shoulders of a child. Even in cases without external laceration, relaxation of the vagina occurs, and the posterior wall falls away from the anterior one. This rolling out of the mouth of the vagina, as if the drawing-string had been broken, exaggerates the appearance of laceration of the perineum, making it seem more extensive and important than it really is. The operation which he proposed had for its object the shortening of the posterior wall of the vagina, so as to restore to it its relation to the anterior wall. This object is attained by making two crescentic lines of denudation transversely across the vagina, and uniting them by a line of sutures which after the operation are hidden entirely within the vagina. The result is that the perineum is drawn upward towards the pubes, and any laceration existing in it may be disregarded, or it may be united by an interrupted suture. He maintained that we might leave out of consideration, in performing the operation, everything in regard to the external organs outside the line of hymen. His object was to call special attention to the rôle which the fascia plays in supporting the pelvic organs, and to the fact that the lacerated perineum has little or nothing to do with the symptoms complained of.

Afternoon Session.

Dr. Emmet gave a résumé of his paper read at the morning session.

Dr. Reamy said the operation described seemed an admirable one for a particular class of cases, the number of which he believed to be limited. He did not regard it as a substitute for the operation for lacerated perineum.

Dr. F. P. Foster fully endorsed the statements of Dr. Emmet with regard to the function of the perineum, and denied that it had anything whatever to do with supporting the uterus under ordinary circumstances.

Dr. Sutton said that he had understood Dr. Emmet to deny the existence of the perineal body. He could not believe that he meant to say that there is no such body existing between the rectum and the vagina, which is shown in frozen sections. He believed that the uterus was supported by all the surrounding structures.

Dr. Emmet, in closing the discussion, said that he would not deny the existence of the perineum, but would deny the existence of a body anything like that which operators had attempted to build up, called the perineal body. He thought the members would understand his operation better when they had an opportunity of reading the paper.

The Management of Accidental Puncture and other Injuries of the Gravid Uterus as a Complication of Laparotomy.

C. C. Lee, M.D., of New York, called attention to this grave complication of laparotomy, and gave the details of seven cases, all he could find in medical literature, including one that had occurred in his own practice. From them he deduced the following conclusions:

First.—The pregnant womb may be punctured or otherwise wounded during laparotomy without necessarily causing abortion.

Second.—Both from *a priori* and clinical evidence miscarriage seems to depend upon injury of the uterine contents, not of the womb itself, however severe.

Third.—If the former has certainly occurred, Cæsarean section is indicated and should be promptly performed. In this case the utmost care must be subsequently taken to secure thorough drainage from the uterine cavity.

Fourth.—If the uterine walls alone are injured, the wound is to be treated on general principles. If a deep puncture or incision, it must be sutured with the minutest care, with exact coaptation of the edges. For this purpose fine silk sutures, rendered antiseptic, are the best. If a nick or superficial puncture, it must not be ligated, for ligatures cut quickly through uterine tissue; if too small to be sutured, the bleeding points must be lightly touched with the thermo-cautery until oozing has ceased. Good surgery and the dictates of humanity alike demand that under such circumstances a chance of survival be given the child as well as the mother.

DISCUSSION.

Dr. Byford, of Chicago, said that before hearing this paper he had concluded that it would always be proper when the uterus had been accidentally wounded in laparotomy to open the organ and remove its contents, but after hearing Dr. Lee's case he believed there might be exceptions to this rule, especially in the early stages of pregnancy; in the later months the traction of the muscular fibres is so great that he felt sure the stitches would tear out. In such a case he should be inclined to remove the contents of the uterus, even if the wound had not involved its whole thickness.

Remarks were also made by Dr. Wilson, of Baltimore, Dr. Garrigues, of New York, and by Dr. Lee in conclusion.

Is Extirpation of the Cancerous Uterus a Justifiable Operation?

A. Reeves Jackson, M.D., of Chicago, said that he proposed to discuss this question: In view of known facts, is it justifiable to extirpate the uterus for carcinomatous disease? Reviewing the history and the statistics of the operation, he concluded that extirpation of the uterus for cancer does not prolong but destroys life. By the abdominal operation there was a mortality of 72.5 per cent; by the vaginal operation, 28 per cent. His conclusions are as follows:

I. Diagnosis of uterine cancer cannot be made sufficiently early to insure its complete removal by extirpation of the organ.

II. When the diagnosis can be established, there is no reasonable hope of effecting a radical cure, and other methods of treatment offer far less danger than excision of the entire organ, and are equally effectual in the amelioration of suffering, in retarding the progress of the disease, and in prolonging life.

III. Extirpation of the cancerous uterus is a highly dangerous operation, and neither lessens suffering, except in those whom it kills, nor gives a reasonable hope of a cure in those who recover. Hence, as it is lacking in all the essentials of a beneficial operative procedure, it should be excluded from modern surgery.

DISCUSSION.

Dr. Van de Warker, of Syracuse, endorsed the statements just made, and described his treatment of progressive destruction and sloughing of the uterus by chloride of zinc. He had operated on eight cases, three of which had died.

Dr. Emmet approved the sentiments of the paper, and reported one unsuccessful case. If the operation is ever done, it should be by the vagina, and should be restricted to removing the uterus for sarcoma.

Dr. Baker, of Boston, opposed the conclusions of the lecturer, and said that he had operated on at least thirty cases by the vaginal method, and he could recall six cases of at least five years' standing which have absolutely recovered. The cases in which total extirpation is advisable are extremely rare, and comprise only those which begin in the fundus of the uterus.

Dr. Palmer, of Cincinnati, said that the operation in some cases is clearly unjustifiable. In others it may be justifiable. In the latter he would include only those cases of sarcoma starting in the uterine body, as it is usually impossible to determine whether the disease has already extended beyond the uterus or not. He made it a rule to decline to operate.

Dr. Sutton said that removal of the uterus by the vagina is not as fatal as ordinary ovariotomy. Schroeder's mortality was only one in thirteen. He then described the details of his vaginal operation for the removal of the uterus. The opening in the vault of the vagina is not sewed up after the operation, but a large drainage-tube is passed through the vagina into the peritoneal cavity, and the vagina packed with cotton and iodoform. This drainage-tube is not used by Martin, who simply uses the antiseptic tampon.

Dr. Jackson closed the discussion by reaffirming his conclusions.

A paper entitled *A New Method of Operating for Fistula in Ano*, by Edward W. Jenks, M.D., of Chicago, was read by title.

THIRD DAY.—*Morning Session.*

The first paper read was one entitled

Menstruation after Extirpation of the Ovaries,

by Henry F. Campbell, M.D., of Augusta, Georgia. Dr. Campbell said that he would not question the influence of the ovaries over the function of normal menstruation; but cases have occurred in which menstruation persisted after their removal. This return of menstruation after double ovariotomy has been attributed to habit, to plethora, and more recently to the fact that in removing the ovaries there had not been taken away the portion which is the real inciter to the menstrual nisus,—the Fallopian tubes. With-

out denying any of these propositions, he wished to advance an explanation which had not been hitherto noticed, or, at least, given its full value. On account of the prominent position occupied by the ovaries in the female genital apparatus, it might be reasonably anticipated that their removal might have some influence upon the function of menstruation,—that it might cease. We know the influence that the mammary gland exerts upon menstruation, and that mental emotions also influence this process. It is true that this is in the presence of the ovaries; but in the absence of these organs can we call into existence anything which might explain the influence of these remote inciter points upon the congestion of the uterus and menstruation? for it is possible from the influence upon the uterus of these inciters to menstruation, that even after removal of the ovaries the menstrual discharge might continue. He cited a case of a young girl seven to eight years old, in whom menstruation followed the mumps, from metastasis to the ovaries. The menstrual discharge occurred for several months, and then gradually subsided. She changed naturally at the age of fifteen. In another child menstruation appeared temporarily as a result of an abscess of the mammary gland: the menstrual nisus afterwards disappeared, to return normally at the physiological period. He could only explain these cases on the supposition of a communication through the nervous system, and for certain reasons he located in the lumbar region of the spinal cord a nervous centre controlling ovulation and periodical uterine congestion. He mentioned a case of amenorrhœa and sterility which was cured by putting a child to her breast to nurse; and another where a grandmother from putting a child to the breast began to secrete milk, and nursed the child for months. The fact that a man can feel pains in his foot and toes after amputation of the leg was cited to prove that the centre in the spinal cord may remain active even after it is cut off from the organ to which it belongs.

The object of Battey's operation is to nullify sexuality; but it does not do so entirely; it might if performed before development had taken place, but after the organs have undergone periodical congestion for years the centre is normally developed, and, accustomed to respond to the irritation of healthy or diseased ovaries, may continue its action upon the uterus even after the ovaries themselves have been removed. That is to say, through the action of the nervous centre, probably situated in the lumbar enlargement of the spinal cord, the uterus may continue its function of menstruation even after the removal of the normal inciters to menstruation, which he admitted to be the ovaries.

DISCUSSION.

Dr. William Goodell said that the return of menstrual periods after oöphorectomy is not a common occurrence, but in the cases in which it was present this might be the probable explanation. He had noticed a sanguinolent discharge on the third or fourth day after removal of the ovaries, which he attributed to the irritation of the ligature.

He mentioned a case which had a bloody discharge coming on several months after oöphorectomy, and he found it due to sarcoma of the uterus. Where menstrual discharges regularly occur it is possible that there is a third ovary present, as suggested by Koeberle. Another explanation is that possibly some of the ovarian stroma had been left behind, as it is difficult in some cases with adhesions to separate the ovary entirely without tearing. He thought that the paper should have contained some statistics.

Dr. Emmet reported a case of double ovariotomy where he had also removed both Fallopian tubes. The patient since then has menstruated thirteen times. The only difference noticed was that her periods were not quite so long as they were previously.

Dr. Garrigues mentioned a case of a young woman who after removal of both ovaries married and had a child. Here there must have been a third ovary present.

Dr. Thomas said that Dr. Campbell's explanation might be possible in some cases; he was not prepared to deny or to accept it. With regard to the frequency of menstruation after operations, he said that he had performed double ovariotomy in fifty or sixty cases, and the impression upon his mind was this: where the ovaries are present, menstruation is the rule; where they have been removed, menstruation is the exception. After their removal the uterus may pass through some periods of congestion and metrostaxis, on the same principle as a sturgeon's heart will beat after removal from its body,—by a sort of registering action, as Professor Draper called it. He had performed both Battey's and Tait's operation, and believed the latter less likely to be followed by this spurious menstruation, since it removes more tissue. He referred to an operation in which he removed two diseased ovaries, and found a third normal, which he allowed to remain. He does not believe that the Fallopian tubes have anything to do with inciting to menstruation: he therefore had adopted the rule to remove the ovaries if they are diseased, but not to remove the Fallopian tubes unless they also are diseased.

Dr. Byford said that in giving an explanation of the persistence of menstruation after ovariotomy, very much depends upon what is called menstruation. If ovulation is menstruation, then menstruation can occur only when ovarian stroma is present; if a bloody discharge from the uterus is menstruation, it may occur, under certain circumstances, after the ovaries have been removed.

Dr. Mann mentioned disease of the uterus among causes of spurious menstruation after double ovariotomy: in one he had found cancer of the cervix.

Dr. Campbell said that he had examined bodies for forty years, and never saw a supplementary ovary, but did not deny its possibility. He said that habit does not explain anything except nervous action: the sturgeon's heart beats after removal on account of its contained ganglia. He had not denied that the ovaries are the natural inciters to menstruation, but he had endeavored to pursue the subject a little deeper in order to show how they bring it about.

Remarks on Chronic Abscess of the Pelvis.

W. H. Byford, M.D., of Chicago, read a paper in which he discussed the pathology and treatment of certain forms of chronic abscess within the pelvis. He traced them from a bloody effusion, generally after confinement, the hæmatocele becoming purulent, and subsequently either discharging or being formed into a solid fibroid mass by absorption of its fluid contents. In old abscesses he had found tag-like processes depending from the interior of the cyst, which is lined by hyogenic membrane, and he advocated their removal by the curette after evacuating the cyst. With regard to method of opening, he advocated free opening into the vagina, and the use of antiseptic washes. The aspirator needle may be inserted into the abscess, and a bistoury run along it as a guide, an opening being made large enough to admit three or four fingers. He looked upon the interior of the abscess as being similar in structure to the surface of an external ulcer, as it may have healthy or flabby and fungoid granulations, and may give rise to healthy or unhealthy pus. In the course of time the granulations become converted into cicatricial tissue. He referred to several cases illustrating the principles of treatment.

DISCUSSION.

Dr. Thomas thought that the author of the paper had rendered a good service in studying the changes in the lining membrane. There is one important point about opening these abscesses. Some years ago Dr. Brittain, of New Orleans, recommended the trocar in seeking after the pus. Dr. Mundé still more recently advocated the aspirator; Dr. Lyman has recommended the same. In his own opinion, there is no more dangerous practice in gynæcology than to seek for these abscesses, when they are located high up, with the trocar or aspirator: this should only be done after the diagnosis has been made by manipulation and other means. He had employed the aspirator himself in diagnosis, but not as a method of treatment, and thought it a very bad method. The opening should be a free one. In order to keep the opening from contracting, he had a glass tube with a flange made to insert into the opening, so that he could use daily injections of carbolic acid and iodine.

He mentioned a class of cases where the pelvis seems filled with an abscess, the uterus is immovable, and the tissues are hard as a board. In these he had adopted the method of Tait in making an incision along Poupart's ligament into the abscess and cleaning it out and using frequent injections. With reference to the curette, he had had no experience with it in these cases.

Dr. Goodell was pleased with the paper and recommendations of Dr. Byford as to the curette. He preferred permanganate of potassium for the injections. He did not regard the aspirator as being so dangerous as the last speaker did: he had used it with great relief when the pus was situated high up. He had also performed Tait's operation, carrying a drainage-tube through into the vagina.

Dr. Thomas, in reply to a question about the performance of the operation in a case in a state of great prostration, said the operation was a desperate one, but the patient's case is even more desperate: it might offer the only chance of recovery.

Dr. Sutton saw Esmarch, of Kiel, scrape out abscesses in all parts of the body, and thought it the accepted treatment abroad.

Dr. Campbell said that he was not familiar with the practice of curetting abscesses, but after evacuation he sometimes packed them with linen, in order to encourage granulation. He urged the importance of constitutional measures, and particularly of the tartrate of iron. For injections he preferred Labarraque's solution.

Dr. Byford, in closing, said that he had not presented anything like a complete treatise on pelvic abscess, but had simply tried to call attention to one form, and to bring its treatment before the Society for discussion. In the cases mentioned by Dr. Thomas he had several times carried out the treatment mentioned, by carrying a drainage-tube into the vagina.

Ergot: the Use and Abuse of this Dangerous Drug.

George J. Engelmann, M.D., of St. Louis, made some remarks upon ergot, calling attention to its powerful action, and to the danger of its abuse by nurses, midwives, and the public generally. He said that he never had any real use for this drug; its action can never be relied upon with certainty. The only condition in which it might be of use is in postpartum hemorrhage, and here we have safer and more efficient remedies. He would like to see the use of ergot restricted to the non-pregnant womb. There are no circumstances in which it is necessary to give it, and few in which it is desirable to give it in this condition. It is only in the third stage of labor that the constant contraction of the uterus is

NORMAL LIQUIDS.

WE HAVE placed before the medical profession, under the name of "NORMAL LIQUIDS," a class of preparations for which we believe there has long been a demand. Normal Liquids are, essentially, fluid extracts, but they differ from these preparations as manufactured after the formula prescribed by the "Pharmacopœia," in that they are of definite and uniform strength, and not dependent for their activity on the strength of the drugs from which they are prepared. The physical condition of a drug is no criterion of its alkaloidal strength, and as this condition is usually the sole guide in the selection of the drugs from which fluid extracts are prepared, it follows that there must be great variability in the strength of such preparations manufactured from different lots of drugs. In the manufacture of Normal Liquids the crude drug is assayed previous to maceration, and its precise strength determined. Should this strength not be sufficient to bring the strength of the finished fluid up to the standard adopted for it, the quantity of the crude drug is sufficiently increased to secure it, as determined by another assay of the finished preparation. By this method Normal Liquids are as definite and uniform in their strength as morphina, quinina, or other alkaloids.

We were induced to prepare Normal Liquids through the favorable reception of our Liquor Ergotæ Purificatus, which is prepared after the manner above indicated. Our list of these preparations is as yet limited to the following, but it is our design to increase it until it shall embrace all drugs containing alkaloidal principles:

Liquid Aconite, Normal.	Liquid Ergot, Normal.
Liquid American Hellebore, Normal.	Liquid Foxglove, Normal.
Liquid Belladonna Leaves, Normal.	Liquid Gelsemium, Normal.
Liquid Belladonna Root, Normal.	Liquid Henbane, Normal.
Liquid Cannabis Indica, Normal.	Liquid Ipecac., Normal.
Liquid Cinchona Calisaya, Normal.	Liquid Mandrake, Normal.
Liquid Cinchona Red, Normal.	Liquid Nux Vomica, Normal.
Liquid Colchicum Root, Normal.	Liquid Rhubarb, Normal.
Liquid Colchicum Seed, Normal.	Liquid Stramonium Leaves, Normal.
Liquid Conium Seed, Normal.	Liquid Stramonium Seed, Normal.

We bespeak for our Normal Liquids the cordial indorsement of all who subject them to either physiological or therapeutical tests. They are a further move in the direction of definite therapeutics, and as such they will commend themselves to progressive physicians.

PARKE, DAVIS & CO.,

MANUFACTURING CHEMISTS,

NEW YORK:
60 Maiden Lane and 21 Liberty Street.

DETROIT, MICHIGAN.

BOUDAULT'S PEPSINE.

The only Pepsine used in the Hospitals of Paris for the last 30 years.

Unlike the various substitutes which, in some cases, are but unscientific or incompatible compounds, forced upon the Medical Profession as aids to digestion by extensive advertising, but which, when submitted to the proper tests, are found to be almost useless as digestive agents, Pepsine is constantly gaining in the esteem of the careful practitioner.

Since the introduction of Pepsine by Boudault and Corvisart in 1854, the original BOUDAULT'S PEPSINE HAS BEEN AT ALL TIMES CONSIDERED THE BEST, as is attested by the awards it has received at the Expositions of 1867, 1868, 1872, 1873, in 1876 at the Centennial Exposition of Philadelphia, and in 1878 at the Paris Exposition.

The most reliable tests, carefully applied, will satisfy every one that BOUDAULT'S PEPSINE HAS A MUCH HIGHER DIGESTIVE POWER than the best Pepsines now before the Profession, and is therefore especially worthy of their attention.

With a view of bringing this important remedy within the reach of all, *the price has been materially reduced.* It is now not only the best, but comparatively the cheapest.

In answer to frequent calls, another preparation is now offered,

BOUDAULT'S SACCHARATED PEPSINE,

having the same high digestive power as the amylaceous; it will be sent only when specified.

Boudault's Pepsine is sold in bottles of 1 ounce, with a measure containing exactly 5 grains; also in bottles of 4, 8, and 16 ounces for dispensing.

Boudault's Saccharated Pepsine is sold in bottles of 1, 4, 8, and 16 ounces for dispensing.

Besides Boudault's Pepsine in powder, we offer also

BOUDAULT'S WINE OF PEPSINE.

In this preparation the taste of Pepsine being perfectly disguised, it may be recommended to persons who have difficulty in taking Pepsine in the form of powder.

DR. RABUTEAU'S

(Laureate of the Institute of France)

DRAGEES, ELIXIR, AND SYRUP OF IRON.

"The experiments made in the hospitals of Paris have demonstrated that *Dr. Rabuteau's Dragees, Elixir, and Syrup* regenerate the red globules of the blood with a rapidity never observed with the use of the other ferruginous preparations. These results have been proved by the various *Compt-Globules.*

"The ferruginous preparations of *Dr. Rabuteau* do not cause any constipation, and are perfectly tolerated by the weakest persons."—*Gazette des Hôpitaux.*

Dr. Rabuteau's Elixir is prescribed when some difficulty is experienced in swallowing the Dragees; it is especially adapted to weak persons whose digestive functions need strengthening or stimulating.

Dr. Rabuteau's Syrup is especially prepared for children, who take it readily because of its agreeable taste.

A sample of Rabuteau's Dragees will be sent free to any physician mentioning THE MEDICAL TIMES.

Prepared by CLIN & CO., Pharmacists, Paris. E. FOUGERA & CO., Agents for the United States.

TANRET'S PELLETIERINE

FOR THE TREATMENT OF TAPE-WORM (TÆNIA SOLIUM).

This New Tæniafuge, the active alkaloid of Pomegranate Bark, has of late come into extensive use in France for the treatment of Tape-Worm (Tænia Solium). The results of numerous experiments with it at the Marine Hospitals of Toulon, St. Mandrier, etc., and in the Hospitals of Paris, St. Antoine, La Charité, Necker, Beaujon, etc., have all been most satisfactory. Dr. Dujardin-Beaumetz, Member of the Academy of Medicine, and Prof. Laboulbène, in their report to the Society of Therapeutics, have given it their unqualified approval after the most searching experiments. This preparation is pleasant to administer, and, if certain preliminaries are observed, success will be insured. Pelletierine is prepared by

M. CHAS. TANRET, Pharmacien de 1re Classe, 64, Rue Basse du Rempart, Paris.

DUCRO'S ALIMENTARY ELIXIR,

A COMBINATION UNITING THE PROPERTIES OF

ALCOHOLIC STIMULANTS AND RAW MEAT.

This preparation, which has been used with great success in the hospitals of Paris since 1868, is adapted to the treatment of all diseases requiring the administration, in a small volume, of a tonic able to stimulate and support the vital forces, as *Pulmonary Phthisis, Depression and Nervous Debility, Adynamia, Malarious Cachexia, etc.*

Prepared by EMILE DURIEZ & CO., Successors to DUCRO & CIE., Paris.

Agents for the United States, E. FOUGERA & CO., NEW YORK.

desirable; but even here damage may be done by the use of ergot: the placenta may be incarcerated, and he would never advise its use till the uterus is emptied. Some of the dangers of its use are ruptures of the uterus, lacerations of the cervix, vagina, or perineum, besides possible injuries to the child. The worst feature of it is that the injuries produced by it are usually not noticed at the time, and the physician who gives it is generally in ignorance of the damage that is done, which is only discovered long after by the consultant, who may learn, perhaps only by accident, that ergot has been used.

DISCUSSION.

Dr. Johnson said that he had read a paper on this same subject last winter, condemning the use of ergot in parturition; but in the discussion Dr. Barker had directed attention to the fact that it might be useful in cases of threatened hemorrhage where chloroform has been given. He did not agree with the author of this paper as to the reckless use of it by the profession. He did not know that any intelligent physician would give it before the last stage of labor.

Dr. Campbell said that in 1836 or 1837 Dr. Milton Anthony, a Southern physician, had written some stringent articles upon the use of ergot in labor, limiting its use, and advising that it should never be given before full dilatation of the os, and rarely before the expulsion of the child. He said this had been his own practice: he would never give it for post-partum hemorrhage, but in order to prevent post-partum hemorrhage.

Dr. A. H. Smith thought ergot in the hands of the general practitioner an unmitigated evil. It is always calculated to do harm, and often does harm. He thought the tetanic contraction produced by ergot was unnatural and undesirable. The contractions of the uterus should be intermittent: therefore every one who gives ergot to produce expulsion of the contents of the uterus violates nature. In the early stage of labor it may produce rupture of the uterus, and in the later stage it is unnecessary. In conclusion, he denied that chloroform produces relaxation of the uterus or predisposes to post-partum hemorrhage.

Dr. Campbell said that he had never given ether in a case of labor in his life; he had always used chloroform; but he still thought it disposed a little towards the relaxation of the uterus.

Dr. Ellwood Wilson said that he had used chloroform for years in his practice, but had been obliged to give it up on account of its tendency to produce post-partum hemorrhage without any particular relaxation of the uterus. He had seen the same from the long-continued use of ether. He had been surprised to hear that ergot should be abolished. He believed that no man should approach a case of placenta prævia without ergot. In thirty-two cases in his own practice he had used it in order to obtain the very tonic contraction which it had been claimed it exerts. He had also been surprised to hear that it had no value in post-partum hemorrhage. He considered it of immense value in post-partum hemorrhage. The difficulty usually is that ergot is given too late and in too large quantities. He said that in cases of long-delayed labor followed by hemorrhage, after its administration the patient usually called attention to a feeling of heat, at the same time the uterus contracts and the bleeding ceases. He regarded this as a very important use of ergot. A dose of half a teaspoonful of the fluid extract will produce its impression in about ten minutes, and after the expulsion of the placenta will produce tonic contraction of the uterus. He said he thought it bad practice to throw water, carbolized or non-carbolized, into the recently-delivered uterus. As regards the use of ergot after abortion, he had been thus employing it all his lifetime, and had never experienced any great difficulty in treatment except in one case which he had unfortunately tamponed. The next day she had peritonitis, and died in thirty-six hours.

Dr. Engelmann feared that he had been misunderstood. He had not meant to discuss the limits of the possible use of ergot when used in scientific medicine and in skilful hands, but to assert his belief founded on experience that it is a dangerous drug and does a great deal of mischief as commonly employed. It is a great factor in producing uterine disease. He did not think it necessary even in post-partum hemorrhage, because there are better and safer means of treatment, and these means should be more generally employed.

A paper entitled *A Theory to Explain the Relaxation of the Vagina and Perineum during Labor*, by Dr. James R. Chadwick, of Boston, was read by title, Dr. Chadwick having been called away.

The hour for adjournment having arrived, the programme was declared closed.

Dr. William Goodell offered a series of complimentary resolutions to Dr. Chadwick, the former Secretary and founder of the Society, which were unanimously adopted.

On motion, similar resolutions were adopted with regard to Dr. Mundé, who had been for several years the Treasurer of the Society.

The newly-elected President, Dr. Albert H. Smith, upon taking his seat returned thanks for the honor conferred, and, on motion, the Society was adjourned.

OFFICERS FOR THE ENSUING YEAR.

President.—Albert H. Smith, Philadelphia.
Vice-Presidents.—James R. Chadwick, Boston; Samuel C. Busey, Washington.
Secretary.—Frank P. Foster, New York.
Treasurer.—Matthew D. Mann, Buffalo.
Members of Council.—T. G. Thomas, For-

dyce Barker, New York; T. A. Reamy, Cincinnati; R. S. Sutton, Pittsburg; R. B. Maury, Memphis.

The Society then adjourned, to meet on the third Tuesday of September, 1884, in Chicago, Ill.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

AT a conversational meeting held at the hall of the College of Physicians, Philadelphia, September 12, 1883, the President, Dr. Wm. M. Welch, in the chair, Dr. Chas. M. Seltzer read a paper on "Dietetics for the Sick" (see page 5).

DISCUSSION ON DIETETICS FOR THE SICK.

Dr. L. Turnbull, in opening the discussion, said: In reference to these questions my opinions are rather of the old-fashioned kind, and I believe that courses of instruction on cooking will be of much use to physicians. Dr. Benj. Rush was accustomed in his lectures to remark that "a physician should spend six months in a kitchen before entering upon his practical career." He desired to heighten the importance of a knowledge of the effects of food, and also the correct way of preparing it. All these advantages could be combined with a course on pharmacy. Physicians should learn how to make beef-tea, extract, etc., and similar articles. The important preparations of mush, of Indian and oat meal, for instance, are rarely properly made. They should be prepared over-night, so as to be thoroughly gelatinized; if made in the morning just before being served, they will not be digestible. In cases of very weak stomachs, many articles of diet may be peptonized with great benefit by using a small amount of a mixture of sodium carbonate and pancreatin, these being allowed to act for a short time at a temperature of about 80° F. Fairchild, of New York, prepares powders containing these peptonized materials in convenient amount. Such peptonized foods are like the old-fashioned preparations made with rennet and warm milk, and will be well borne by delicate stomachs. An article that is often wrongly prepared is barley. It may be softened and extracted with water, or it may be torrefied so as to make a sort of malt extract. In the latter form it is very suitable as a substitute for the diastase-like principle of the saliva in cases where that secretion is deficient. It can easily be given mixed with other food, as in puddings, for instance.

This summer we have been very successful in relieving the irritability of the stomach and bowels of both children and adults, due to temporary indigestion, by substituting first barley-water alone, and after a time a wine-glassful of barley-water, with half a tumbler of milk, or its equivalent of condensed milk.

Too little attention is given to character of water. It is sometimes very bad, containing either injurious mineral or vegetable matter. The Boston water-supply was much injured lately by certain sponge forms.

Butter is an article of food which is often impure, and, besides, objectionable substitutes for it are often sold. The mixtures of animal fats known under the names of oleomargarine and butterine should not be used in the preparation of food.

Beef-tea contains often but little nourishment, and in debilitated conditions, such as most cases of typhoid fever, beef-essence, made, not from the round of beef, but from the neck, in which blood is found, will be much more nourishing. A valuable form of beef-juice can be prepared by cutting up in pieces fresh beef and placing it under a block of ice until, by the pressure, all the blood has been extracted. With the addition of a little salt it has been found to be retained by the most delicate stomach, and is very useful in cases of great exhaustion.

Dr. Albert H. Smith said: The older we get, the less disposed we are to rely on medicine and the more on diet. The remarks in the paper in reference to the importance of teaching physicians the art of cooking are deserving of full endorsement. On one point, however, I cannot agree with the author of the paper. He seemed to advocate the use of highly-stimulating food in acute diseases; in other words, the methods advocated by Dr. Thos. King Chambers in his fascinating work,—a work, however, which has done great injury. Dr. Chambers's idea was that all disease was due to depression, and therefore the remedy was to stimulate the system. This is an attractive theory, but is not true. In cases of disease attended with high temperature, we only add fuel to the flame by the use of stimulating food.

Nature has admirable powers of taking care of herself, even under a starvation regimen. The use of a low form of diet, with refrigerants and depressants, may often be of the greatest benefit. I can look back on my early experience, and recall cases in which, after operative measures, patients have been treated on the theory that plenty of pabulum should be furnished in the system, but such patients have perished. A strong patient will in such cases do much better on a low diet. Adhesive inflammation will be secured more satisfactorily on the low-diet system.

Dr. J. M. Barton: I had under my charge during three years a patient who sustained life on about a pint of milk a day,—never more than a quart a day. He was a physician, who had his own views on questions of diet and therapeutics. Dr. A. H. Smith is right in his position as to the importance of low diet after operations, but in typhoid fever we have a very different indication. In the first case—*i.e.*, after operations—food frequently acts as

an irritant, but in the low fevers the patient is exhausted and needs support.

Dr. Forbes: I am reminded of a compliment which I heard the younger Larrey pay to Orfila, the great French chemist. He said that he (Orfila) was the greatest cook that ever lived. He said Orfila understood the disintegrating power of hot water. The effect of thorough boiling is most important, and since the days of Washington it has been an article of war that beans should be boiled for six hours. In the Crimea, marked difference was seen between the French and English troops on account of the superior attainments of the French officers and surgeons in reference to many of the details of a soldier's life, and especially in cooking.

Dr. Seltzer, in closing the discussion, said: I did not wish to include in the paper a discussion of the methods of preparing food, but merely to express the idea that it is important that doctors should know what to cook and how to cook. Many articles of food that as ordinarily prepared are unfit for the sick can be cooked so as to be palatable and digestible. Mrs. Rorer's method of cooking liver is an instance of this. She exhausts it with water to remove blood, then places it on ice until required, when it is cut into thin slices and toasted: sweetbreads are somewhat similarly prepared.

As to the use of stimulating food, we must judge Dr. Chambers's views by his own method. He draws the line between acute and chronic diseases, not making time the basis of the classification, but the tendency of the disease. Acute diseases tend to recovery, and these he leaves undisturbed; chronic diseases tend to fatal results, and in these he uses a highly nutritious diet, stimulating when a depressed state exists.

In reference to the suggestions made by different speakers as to the importance of systematic instruction of physicians in the art of cookery, I may say that such courses are now being organized. I do not think that such instruction can be advantageously given with pharmaceutical teaching. A woman's taste and tact are essential to the art.

Dr. Henry Leaman then read a paper on a "Case of Amputation of the Breast, with Remarks" (see page 8).

DISCUSSION ON AMPUTATION OF BREAST.

Dr. Baldwin: I remember that the late Dr. Atlee spoke of the effects of arsenic in carcinoma and gave a number of cases in which he used it with the apparent effect of preventing the return of the tumor. I employed it in a case on which operation was performed in 1875, the patient being put on the use of Fowler's solution, continued until 1876, when the growth redeveloped and a second operation was done in 1878; no return has occurred to this time. The use of arsenic was discontinued after the second operation. During the formation of the second growth some trouble occurred in the lung, and cancer of that organ was feared, but it disappeared after operation.

Dr. Forbes: Dr. Leaman speaks of a period of efflorescence after operation, by which I understand a general development in different organs; this, as he remarks, does not always occur after first operation. In 1864 I removed a cancer from the breast of a lady. In 1867 a hardened growth appeared in the cicatrix. It was not removed at once, as it was then giving no pain. In a short time, pain having developed, it was removed. It returned a number of times, and was each time removed until it developed in attachment to the interosseous cartilage and the muscles, and then I declined to remove it, although the patient very much urged me to do so. It continued to increase, and in eighteen months it involved the integument on the clavicle and sternum. Its condition was much aggravated by various caustic applications. Finally, some irregular parties attempted to remove parts of the diseased mass, and this was followed by an efflorescence, and a number of organs in the thorax and abdomen became involved. The patient died eighteen months after the last attempted operation.

I have heard Dr. Geo. W. Norris speak of this condition of efflorescence and its likelihood to occur in patients upon whom the cauterizing and escharotic treatment had been practised. After such treatment he advised non-interference with the knife.

Dr. J. M. Barton: I have been interested in examining the advertisements and circulars of the empirics who claim to cure cancer without operating, and I find them reporting cures of cases of over forty years' duration. Now, as scirrhus if left untreated does not usually last more than four years, it must be that these long cases are benign tumors.

Even when the knife does not cure, it may prolong life,—make it more tolerable. Operation offers us ten per cent. of recoveries. Dr. Leaman's case can be regarded as typical. The almost immediate return in the axilla is suggestive of the possibility that some affected gland had escaped removal. The removal of the entire breast in the earlier stages gives chance of total recovery, and in the later stages, with ulceration, operation is also useful; but in the intermediate periods, when the tumor is extensive and adherent to the adjacent structures, non-interference is best.

Dr. Albert H. Smith: I am glad to hear Dr. Barton advocate the repeated use of the knife; I believe in attacking the tumor every time it appears, for, at the least, life may be prolonged and made comfortable, and the patient may be spared the suffering and loathsome discharges of the advanced stages of the disease, conditions which make her a source of misery to herself and to those around her. Cancer is doubtless a local disease,

although a constitutional taint or tendency is probably inherited. Yet, if the tumor be removed early, a cure can be obtained. Dr. Leaman's patient did not do well because she did not follow the advice he gave at first. Removal of the breast should be complete; every reappearance should be met by operation. I recall the case of a patient from whom, at the first operation, no axillary glands were removed, but at the second twelve were taken out. Two more operations were subsequently performed; at the last one a very large amount of tissue was removed, but perfect union was obtained. Operation should cease when the condition is such that union by the first intention cannot be obtained. In this particular I cannot agree with Dr. Gross, who pays no attention to the size of the cicatrix or to the question of union by first intention. The patient just referred to has been well during this summer, but is not beginning to manifest infiltration, and the condition is such that primary union cannot be obtained, and I do not consider operation permissible. Under the modern advances in antiseptic surgery, operative interference in cases of cancer becomes simple and entails little suffering, and the after-treatment is not difficult.

Dr. Barton: The important point in operation is to make a complete cleaning out of the affected glands, and the obtaining of this must not be interfered with by consideration of the amount of tissue to be removed, or by the desire for primary union. Where much tissue is removed, the after-treatment is more simple than where flaps are made; no counter-openings are needed; no drainage-tubes; no pockets of pus are formed; but little, if any, fever occurs; the wound usually goes on uninterruptedly to full cicatrization. In hospital practice I rarely have to see a case after operation, from which the breast has been thus removed. I cannot recall a case in which the disease returned in the cicatrix so formed, though it often returns in the axilla. I remember a case in which three operations were performed upon secondary axillary growths in a period of four years,—the last operation being amputation of the arm, ligation of the axillary artery, and removal of the growth,—yet the resulting cicatrix from the first thorough breast-operation remained perfectly soft and healthy.

Dr. Leaman: The case I have reported is an ordinary one, and the operation was certainly performed with ordinary care. The axilla was opened, and all present agreed that no glands were affected except the one removed. The first symptoms of return were shooting pains in the fingers, referable to a nodule near the insertion of the sterno-cleido-mastoid muscle, behind the left sterno-clavicular articulation. Subsequently the axillary glands were involved. A few small nodules have since appeared over the seat of the first tumor.

I think it important to remember that surgeons may make mistakes; that some of the cases diagnosed as cancer and apparently cured by operation may be benign tumors.

In my experience arsenic has not been of use in carcinoma.

A NEW USE FOR AN OLD INSTRUMENT.

Dr. Leaman called attention to the fact that he had found the hooked end of Dr. Gross's ear- and nose-instrument the best and safest means of rupturing the membranes in labor.

A communication was also read by Dr. W. R. D. Blackwood, entitled "Remarks on the Chicago Beef Wire Skewer" (see page 9).

The Society then adjourned.

HENRY LEFFMANN, M.D.,
Secretary.

MISCELLANY.

EPIDEMIC RELIGIOUS EXCITEMENT.—The *Journal de Ploërmel* reports a curious example of one of those outbreaks of epidemic nervous disorder which were characteristic of the Middle Ages, but are now rarely heard of. Of fifty pupils of the Girls' Congregational School of Saint Marlo des Trois Fontaines, upwards of thirty-five have been attacked by a nervous disorder having all the symptoms of St. Vitus's dance. The school has been closed by order of the local authorities.

DR. WILLIAM S. JANNEY has been elected Professor of Practical Anatomy and Clinical Surgery in the Medico-Chirurgical College of Philadelphia.

AMERICAN ACADEMY OF MEDICINE.—The annual meeting of the Academy will be held at the New York Academy of Medicine October 9 and 10.

OFFICIAL LIST

OF CHANGES IN THE MEDICAL CORPS OF THE NAVY FROM SEPTEMBER 22 TO SEPTEMBER 29, 1883.

P. A. Surgeon J. H. BRYAN detached from the U.S. steamship "Miantonomoh," and ordered to the Museum of Hygiene, Washington, D.C.

P. A. Surgeon A. F. MAGRUDER detached from duty at Villefranche, France, and granted six months' leave, with permission to remain abroad during that period.

P. A. Surgeon C. H. H. HALL to be detached from the U.S. steam-ship "Ranger" on reporting of his relief, and await orders.

Surgeon J. L. NEILSON detached from the receiving-ship "Franklin," at Norfolk, Virginia, and ordered to the U.S. steam-ship "Ranger."

Surgeon WILLIAM A. COUVIN ordered to the receiving-ship "Franklin," Norfolk, Virginia.

P. A. Surgeon ROBERT WHITING detached from the receiving-ship "Wabash," at Boston, and ordered to the Naval Hospital, Norfolk, Virginia.

Surgeon G. S. BEARDSLEY granted leave of absence for six months, with permission to leave the United States.

P. A. Surgeon A. A. AUSTIN, orders to Naval Hospital, New York, revoked, and placed on waiting-orders.

P. A. Surgeon GEORGE C. LIPPINCOTT ordered to the Naval Hospital, New York.

Medical-Director GEORGE PECK detached from the Naval Hospital, Mare Island, California, and placed on waiting-orders.

Surgeon D. MCMURTRIE and P. A. Surgeon M. H. CRAWFORD ordered to report at Washington, D.C., October 3, for medical survey.